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ABSTRACT

This handbook is designed to address teachers' most common concerns about learning disabilities (LDs) and teaching adults with LDs. Section 1 defines LDs by describing traits that adults with LDs share. Section 2 focuses on identification of students with LDs. LD characteristics are divided into eight categories: academics, speech/language, motor skills, organization, general behavior, social skills, and emotions. Section 3 discusses how to obtain a formal diagnosis of a LD. Informal learning modality assessments suitable for reproduction are also provided. Section 4 provides strategies for teaching LD students. A list of practical suggestions for teaching adults is followed by specific suggestions for the following: addressing self-esteem; planning programs, including devising and implementing individualized learning plans; and helping students "learn how to learn." Sample learning strategies are preceded by a teaching guideline. These strategies are included: SQ3R (survey, question, read, recite, and review); independent comprehension strategy; ready reading reference; graphic organizers; listening; job outline; retrieval; word problem solving; VAKT (visual-auditory-kinesthetic-tactile) approach. An annotated bibliography lists 50 documents, journal articles, and books pertaining to LDs as they relate to adult basic skills students. Most documents are available through ERIC. Other appendixes include a glossary and list of 21 organizations and agencies to contact for information on LDs. (YLB)

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ED 377 389

RETAINING THE LEARNING DISABLED ADULT

A HANDBOOK FOR
ADULT BASIC EDUCATION INSTRUCTORS

This handbook was compiled by Diane Hawkins under the auspices of Frederick County Public Schools, Adult Education and was funded by the Special Demonstration Project in Adult Education awarded under Section 353 of the Adult Education Act.

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INTRODUCTION

The Maryland State Department of Education has enabled the staff and students of the Frederick County Public Schools Adult Education Division (as well as literacy providers across the state) to benefit from the "Retaining the Learning Disabled Adult" special project. This project was funded through a fiscal year 1993 grant authorized by the Adult Education Act, Section 353 for Special Experimental Demonstration and Staff Development Projects for Adult Education. The goal of the project was to improve the retention rate in basic skills classes via resource intervention and teacher training based on strategies for the education of adults with learning disabilities.

This handbook is based upon the research and workshops carried out under the special project grant. It is designed to address teachers' most common concerns about learning disabilities: what LD is (and is not), how to identify learning disabilities, and how to teach students with learning disabilities. Included herein are several useful appendices: an annotated bibliography of research pertaining to learning disabilities as it relates to adult basic skills students, a glossary of germane terms (marked with an * in the text), and a listing of relevant organizations' addresses and phone numbers. It is hoped that you will find this to be a practical guide as you endeavor to meet the special learning needs of each of your students.

"LEARNING DISABILITIES" DEFINED

A group of twelve adults with learning disabilities contributed to *For You Adults with Learning Disabilities* (available from LDA of Canada, 323 Chapel, Suite 200, Ottawa, Ontario K1N7Z2). They brainstormed this list of traits that they all shared to some degree, and which they felt to be true representation of learning disabilities. The descriptions which follow are paraphrased or abbreviated from the original text.

Confused; Disorganized

It seems that while sometimes you can hear clearly, at other times people sound like they are talking underwater; sometimes you can see clearly, while at other times you seem to be looking through someone else's glasses that you have put on by mistake. Sometimes you can understand what people are telling you to do and can get it right on the first try. At other times, you have to have instructions repeated many, many times, and you still mess up! It is very hard for people to understand that you really want to do well, and are trying hard.

Frustrated; Stressed; Paralyzed Under Pressure

An example: Kevin reports that he was driving a car one day, and was having some trouble following the directions of his friend while listening to the chatter of the other people in the car. As they approached an intersection, his friend told him to turn left. He suddenly couldn't remember which was "left", and he froze. He stopped in the middle of the intersection where he stayed through two traffic lights, totally unable to think what to do. Experiences similar to this are familiar to people with learning disabilities.

Forgetful; Daydreamer

These are words that are familiar to anyone with learning disabilities. Because they often have memory and/or attention problems, people with learning disabilities frequently become distracted and do not finish what they set out to do. Perhaps it sounds silly, but typical examples would be: raking the leaves and leaving them in a pile on the lawn; changing the filter on the furnace, and leaving the old dirty one lying on the floor; going to the drugstore to pick up a prescription, deciding to pick up a newspaper and some pop, and arriving home without the prescription; going home for a weekend to study and discovering that the most important textbook is at school (college).

Low Self-Esteem; Expectations of Failure; Feeling Depressed

The combination of failure experiences and lack of understanding of why they are happening leads people with learning disabilities to expect failure in just about any new situation. When you expect failure you are not likely to put your best foot forward, and so, often fail again. This leads to feelings of low self-esteem, feelings of not being worth very much, of not living up to what people expect of you. These feelings often lead to periods of feeling depressed, or very sad. Sometimes the periods of depression last a short time and sometimes they last a long, long time. It seems that even with excellent support systems, all people with learning disabilities go through these periods of depression and despair before they truly understand and accept their learning disabilities.

Social Inappropriateness

Difficulty getting along with people encompasses both social and work situations. You may misinterpret voice intonations, misread facial expressions and body language, or misjudge personal distance. Trouble making or keeping friends, getting hired or keeping a job is very common amongst learning disabled adults.

Language Processing Problems

All of the adults with learning disabilities who worked on this agreed that they possessed at least some type of problem with verbal expression. Three of the most common (and frustrating) problems were using words out of context, putting words out of sequence, and searching for the right word.

- *Using words out of context*

  This refers to the use of a word that is similar to the correct one but is not correct to use in the given context, e.g., "It's right on the tip of my mind," instead of, "It's right on the tip of my tongue."

- *Putting words out of sequence*

  This refers to using words out of proper order or to mixing up syllables or sounds within a word or group of words, e.g., "He took two steps back and forward" or "He is all muxed ip." Some words seem to be particularly difficult to pronounce, e.g., "specific" becomes "pacific"; "animal", "aminal"; "remember", "renember". And you can forget aluminum -- just call it tin foil!

- *Searching for the right word*

  This refers to the experience of knowing what an object or an idea is and not being able to recall the correct word for it. It produces feelings akin to those of forgetting your wife's name just as you are introducing her to your boss! Those things happen to all people from time to time, but people with learning disabilities experience them more frequently and in a way that is more frustrating, e.g., ordering a hamburger and not being able to think of the word for "the red stuff" (ketchup); or asking to borrow the car in order to pick up "those things for sneezes" (antihistamines). This is a particularly frustrating problem, as people who do not know you may assume that you are not very bright, and really don't know the word. Only you know that 30 seconds ago, or seconds from now, you will have it!

Procrastinator; Great Excuse Maker

It is difficult for a learning disabled person to organize and pre-plan. To execute a plan without getting distracted and leaving it undone is equally challenging. When faced with a task, it is daunting to summon the energy needed to attack it in light of previous failures. An adult with learning disabilities has had lots of practice in excuse making!

Clumsy; Hyperactive

"What were you thinking?" *"Stop and think!"*
"Think, the next time!" *"Watch where you are going!"*

Such phrases are all too familiar for adults with learning disabilities. They have a tendency to speak or act first and think later.

Creative; Ability to Overcome

People with learning disabilities demonstrate a truly amazing ability to try, try, and try again. They often find unique and highly creative ways to do things in order to overcome their areas of difficulty. Many turn these coping strategies into areas of great strength. One young college student compensated for his learning disabilities by sitting right at the front of the classroom to minimize distractions and by taking copious notes to remain focused. Following each class, he transcribed his notes using arrows, bold headings, color coding and pictures to get the information into a highly visual form which best suited his learning style. His notes were soon sought after by his less conscientious peers. Being a business student, he developed a small source of income by selling copies of his notes.

Good Sense of Humor (often self-directed)

Despite periods of depression, and high levels of frustration, stress and anxiety, people with learning disabilities often manage to retain a sense of humor. Perhaps it is the creativity discussed previously which allows them to see the unique and often funny side of a situation. This sense of humor may be used to ease some of the frustrations, to smooth over difficult situations or to defuse the impact of the learning disabilities. A gathering of people with learning disabilities often erupts in laughter as people share some of the more dramatic pickles their learning disabilities have led them into.

Learning disabilities, as characterized above, have always existed. They have been ignored or considered a lack of effort and/or ability; they've been referred to as "word blindness," "minimal brain damage," "perceptual handicap," "neurological impairment," "dyslexia," "dyscalcula," "dysgraphia," "attention deficit hyperactivity disorder" as well as a host of other terms. Since 1962, the government, professionals in various fields, parents, and affected individuals have attempted to define the elusive nature of learning disabilities. At least a dozen definitions have enjoyed prominence at some time with one or more of the interested parties. One definition developed by the National Joint Committee on Learning Disabilities in 1988 seems to be the most precise and acceptable (Hammill, 1990). It reads:

> Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur for a person's entire life. Problems with self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences.

Analysis of the important concepts in this definition will enable you to reach a better understanding of the term "learning disabilities". Consider these five explanations carefully:

"...heterogeneous group of disorders..."

There are many distinct types of learning differences which come under the umbrella of LD. Each individual's learning disability is unique. Learning disabilities can occur at any of the stages in the learning process--receiving stimuli in the sensory organs, transmitting stimuli through the neurals to the brain, internalizing stimuli in the brain, transmitting stimuli through the neurals to the organs of communication, and using the stimuli in these organs. Having learning disabilities is like having a short circuit along the learning path. For example, an individual who has visual-motor difficulties may, although his eyesight is 20/20, be unable to copy a phone number from the phone book correctly. The complex process of converting what is seen into written form does not proceed normally. However, this same person might be fully capable of reading the phone number into a dictaphone or punching it into a "data bank" watch or calculator.

"...significant difficulties..."

When one reads examples of the manifestations of LD, it is easy to say "Oh, I do that" or "That happens to me, too." We all experience moments (perhaps more often when we are tired or stressed) when we have difficulty learning or processing what we have learned. The individual with LD, however, has this difficulty to a disabling degree.

"...presumed to be due to central nervous system dysfunction..."

Recent research (Bigler, 1992) supports the premise that the structure and function of the LD individual's brain is abnormal or is organized differently than that of the non-learning disabled. Importantly and contrary to the literal translation of the term, learning disabilities does not mean that an individual CANNOT learn, rather that s/he is an inefficient learner in situations where affected neurological processes are involved. **YOU CAN** help your student circumvent the difficulties.

"...Problems in self regulatory behaviors, social perception, and social interaction..."

When individuals with learning disabilities experience these difficulties, they are often more noticeable than the deficit in processing information. However, the social

behavior cannot be the basis for determination of learning disabilities; we must look instead for the underlying challenge in acquisition and use of information.

"...Although learning disabilities may occur concomitantly...they are not the result..."

This section indicates that learning disabilities may be one of an individual's characteristics, and that s/he may have extenuating circumstances or other handicapping conditions. For example, a blind person may have a spoken language learning disability, but neither is the cause of the other. They just happen to coexist.

As with any condition, learning disabilities can range from mild to severe. Many individuals have compensated wonderfully. You know them as doctors, lawyers, business people, and neighbors. However, students with undiagnosed learning disabilities who fell through the cracks of PL94-142 (The Education of All Handicapped Children Act of 1975) may be seeking a second chance at academic success in your classroom. Researchers say that between 30% to 80% of those involved in literacy programs display characteristics typical of individuals with learning disabilities.

By applying the knowledge in this handbook and with an open mind and heart, you will be able to help each of your students (whether learning disabled or not) move closer to meeting their educational goals.

IN A NUTSHELL

- A learning disability involves a difference in the structure and function of the affected adult's brain.
- This difference can interrupt learning at one or more of these stages:
  - * interpreting information that is heard, seen or felt.
  - * processing information (e.g. making the "learning connection," storing, remembering, and retrieving it.)
  - * transmitting the information through speaking, writing or doing.
- LD adults may have average to superior intelligence, but their difficulty learning hinders them from reaching their full potential.
- Their learning difficulties are NOT caused by a disadvantaged environment, emotional condition, or poor vision, hearing or motor skills.
- LD is a lifelong condition which usually affects self-esteem, education, vocation, socialization, and/or daily living activities.
- Many adults turn their LD into a disAbility.

HOW CAN I TELL IF MY STUDENT MIGHT HAVE LEARNING DISABILITIES?

People *without* learning disabilities display some characteristics of the learning disabled. The presence of these characteristics, therefore, does not necessarily indicate LD, especially if they occur in isolation or on a small scale. Furthermore, no person will manifest all or even most of these traits. **Only when a clustering of these deficits negatively affects achievement over a sustained period is investigation warranted.** Most of the LD characteristics fall into eight categories: academics, speech/language, motor skills, organization, general behavior, social skills, and emotions.

ACADEMICS

An individual with learning disabilities may:

- Perform very differently from day to day and task to task.
- Have poor reading, writing, or math skills.
- Avoid assignments in areas of weakness.
- Have difficulty following directions.
- Verbalize well but write poorly or *vice versa*.
- Confuse similar letters, words, sounds, and/or numerals.
- Write and print within same document.
- Omit the last letter of words, forget to capitalize, or fail to punctuate.
- Spell poorly, and may misspell the same word within the same document.
- Calculate poorly OR may comprehend basic math skills but fail to apply them correctly.
- Forget information quickly.
- Display poor decision-making skills.
- Fail to draw appropriate conclusions due to faulty reasoning abilities.

SPEECH/LANGUAGE

An individual with learning disabilities may:

- Have trouble understanding words or concepts.
- Have difficulty naming familiar people or things.
- Say one thing but mean another.
- Have difficulty sounding out words.
- Have difficulty pronouncing words.
- Speak too loudly or too softly.
- Often miss the point of discussions.
- Often take expressions of irony or sarcasm too literally, thereby appearing humorless.

MOTOR SKILLS

An individual with learning disabilities may:

- Be poorly coordinated.
- Display poor fine motor skills.
- Have mixed laterality; that is, do some things with the left hand and others with the right.
- Possess poor manual dexterity.

ORGANIZATION

An individual with learning disabilities may:

- Seem unaware of the passage of time.
- Arrive either too late or very early for meetings.
- Forget or lose things.
- Seldom meet deadlines.
- Have difficulty telling right from left.
- Have trouble relating events in proper or logical sequence.
- Use poor work habits.
- Have trouble starting an assignment and, once started, have trouble completing it.

ATTENTION

An individual with learning disabilities may:

- Be easily distracted.
- Often daydream.
- Seem confused.
- Make "careless" mistakes.
- Appear bored or uninterested.
- Often spend minimal time on tasks.

BEHAVIOR

An individual with learning disabilities may:

- Not adjust well to change.
- Not work well independently.
- Be hyperactive; more specifically, may (1) speak or act without thinking, (2) seem unconcerned about consequences, or (3) appear unable to relax.
- Be hypoactive; more specifically, may (1) react slowly, (2) work slowly, (3) sometimes sit and do nothing, (4) seem unemotional, or (5) appear to accept all situations.

SOCIAL SKILLS

An individual with learning disabilities may:

- Talk and/or laugh at inappropriate times.
- Display disturbing habits such as sitting too close to others or staring at people too long.
- Misinterpret social cues and non-verbal language.
- Not accurately interpret the moods of others.

EMOTIONS

An individual with learning disabilities may:

- Have low self-esteem.
- Seem moody.
- Become frustrated very easily.
- Worry excessively.
- Seek immediate gratification.

LEARNING DISABILITIES DIAGNOSED

The determination of learning disabilities is similar to that of any other complex physical or psychological malady; that is, trained and certified professionals are required to render the diagnosis. Obtaining a formal diagnosis will enable your student to better understand his/her strengths and needs and will be the first step in overcoming the effects of the learning disability, as well as obtaining his/her rightful accommodations in educational and vocational settings. Since the diagnosis of learning disabled adults is a relatively recent phenomenon, it is important to understand the evaluation process in order to secure the best services. This advice is adapted in part from HEATH Resource Center's *Adults with Learning Disabilities: Assessing the Problem* by Jay Brill.

The first step is to find an experienced diagnostician for adults. The following agencies are good contacts:

- The state chapter of the Learning Disabilities Association
- Adult Education/Adult Literacy programs/Literacy Councils
- Orton Dyslexia Society
- State Department of Rehabilitation Services
- Community Mental Health Agencies
- Licensed Language Therapists/Psychologists/Learning Specialists in private practice
- Study Skills/Special Education programs at local colleges or school systems
- University-affiliated hospitals

When interviewing a prospective evaluator (whose task is very important), make sure that these questions are answered:

- How many adults has s/he tested for learning disabilities?
- Will there be a meeting to discuss the results?
- Will the discussion address issues such as trouble with school, job, or life at home?
- Will the evaluator give ideas on improvement in the areas of disability (remediation) and how to get around the disability (compensation)?
- How long will the testing take, and what areas will be included?
- What is the cost of the testing?
- With what insurance companies has s/he worked?
- What other funding sources are available?
- How may payment for uninsured testing be worked out?
- Is s/he available for additional consultation? If so, what are the charges?

When the evaluation is complete, one or more of the following professionals may help interpret it:

- Diagnosticians
- Learning Specialists
- LD Consumer Advocates
- Rehabilitation Specialists
- Adult Educators

While awaiting results from the professional evaluation, or if it's impossible to obtain one, (NOTE: The private agency "market rate" for a learning disabilities evaluation is approximately $800 to $1,000. The Department of Rehabilitation Services provides free evaluations to those who satisfy their "order of selection" criteria. If a formal evaluation is not possible at this time, there are several informal screening instruments that you can administer. While they cannot yield an "official" diagnosis, they will enable you and your student to discover more about his/her special learning needs. You may borrow any of the assessments listed here through the Frederick County Adult Education office or order a copy for yourself. Each instrument is named and briefly described below, including an indication of the time needed for administration:

- COOPER SCREENING OF INFORMATION PROCESSING

  A scored "yes/no" individual interview which pinpoints deficits in a wide range of areas: traditional academics as well as attention, motor skills, auditory processing, etc. Included with the screening is an instruction video on administration and scoring. Allow up to one hour. (This screening can be ordered through Learning disAbilities Resources; see *Organizations and Agencies* section.)

- SCREENING TEST FOR ADULTS WITH LEARNING DIFFICULTIES (S.T.A.L.D.)

  Aimed at adults who are reading from zero to fourth grade level, this instrument can be used by teachers, tutors, or volunteers with one student at a time to identify characteristics common to adults with learning difficulties and to prescribe methods and materials for remediation. Allow 35-45 minutes. (This screening can be ordered through ERIC; see *Organizations and Agencies* section; ED 287 988.)

- ACADEMIC ASSESSMENT AND REMEDIATION OF ADULTS WITH LEARNING DISABILITIES: A RESOURCE SERIES FOR ABE TEACHERS

  These manuals cover appraisal and assessment of learning disabilities through interviewing and error analysis to determine intellectual processing strengths and weaknesses. No specific time allotments. (Order these through ERIC; see

Organizations and Agencies section; ED 285351-285356.)

In addition to screening for learning disabilities, you will find it useful to determine the preferred learning style of your student(s). When learning, we receive and express information through modalities*. The quality of the internal information processing (i.e. learning) which occurs depends upon many variables, but if you present information and allow student(s) to express their knowledge through preferred modalities, you will be offering instructional activities that will lower stress, increase motivation, and enhance learning.

COMPONENTS OF A LEARNING STYLE

Information Reception	Information Processing	Information Expression
Visual* input	Making the learning connection	Written output
Auditory* input	Storing	Verbal output
Kinesthetic* input	Retrieving	Motor output

Not all learners have strong preferences for one modality over another but an individual with learning disabilities probably will. This is due to the "short circuit" along the learning path (as you'll remember from the explanation of the learning disabilities definition on the top of page 6). Payne (1992) describes a typical academic scenerio in which the learner takes a placement test (visual reception/motor output) and is assigned written work in a text (visual reception), after which s/he is given a post-test (visual reception/motor output). If the learner has a "short circuit" along the visual and/or motor learning path, this type of instruction will lead to frustration and possible drop out.

The Frederick County Adult Education office has the IBM compatible *Learning Style Inventory* (produced by Educational Activities, Inc.) available for loan. You may choose to have the students complete a paper/ pencil assessment (which can be read aloud if necessary) or the data can be input at the computer terminal by each individual. Computerized tabulation of the responses results in a graph that displays (1) each individual's learning style, (2) the learning style of the class as a whole, and (3) a comparison of your learning/teaching style with that of the class. Finally, you will receive prescriptive information such as the kinds of materials and methods of delivery recommended for each student and/or the class as a whole.

You may also wish to use the informal learning modality* assessments on the following pages. Feel free to reproduce them.

If you find that your student best receives, processes, and/or expresses information by visual* means, you can provide flashcards, outlines, graphic organizers*, pictures, slides and written material. For your auditory* learner you'll want to allow for discussion (one-on-one with you or a peer and whole group), books, tests and lessons on tape, and videos. Guided experiments, field trips, small group activities or stations (which require movement), and "hands on" materials will benefit the kinesthetic* learner. A combination of all three approaches delivered to the whole group will ensure that you are meeting the majority of the learners' needs.

In the strategies section of this handbook you will receive more information about how to use your knowledge of learning styles not only to become a better teacher for all of your students, but to be able to make accommodations for your students with special needs as well.

LEARNING MODALITY* ASSESSMENTS

Source: McAlister, Ellen D., and A. C. Bickley's *Handbook for the Teaching of Beginning Adult Learners and/or Adults with Learning Problems. A Product Formulated for Staff Development of Adult Educators, Volunteer Tutors, and Instructional Aides.*

Modalities refer to the ways in which a person utilizes sensory stimuli to help him/her receive, process, and express information. As an individual goes through the processes of learning, s/he usually depends upon one, two, or a combination of the five basic senses (sight, sound, touch, taste, smell) to help him/her in the learning process.

All individuals use combinations of the five (5) senses to help them learn, but they usually depend upon one sense more than the others to give them strength and reinforcement. The individual who learns best using sight is said to be a visual* learner. The individual who learns best through sound is called an auditory* learner. If the individual learns best through body movement, s/he is called a kinesthetic* learner.

DIRECTIONS FOR PRODUCING MODALITY* PLATES

1. Using the modality* check sheets, make each of the nine (9) rows into a card. (Make the cards large). The instructor uses the cards to show the student pattern sequences or to call out pattern sequences to the student.

2. Cut out five (5) sets of each one of the symbols--five (5) circles, five (5) diamonds, five (5) squares, and five (5) triangles. The student will use these symbols to reproduce the patterns that the instructor shows or calls out to him.

VISUAL MODALITY* ASSESSMENT

Instructions to Instructor

You have made nine (9) sets of cards showing varying numbers of symbols on each card. Show the examinee the first card containing one symbol. Allow the examinee to view the symbol card for two seconds; then ask the examinee to reconstruct what was on the card using the symbols on the table before him. After the examinee finishes the reconstruction, the instructor marks the symbols on the check sheet that the examinee answered correctly. If the examinee reversed any symbol in a sequence, count that as an error and leave unmarked. Continue on in the same manner, each time showing the card, allowing time for reconstruction, and marking the score sheet if the reconstructed symbols were answered correctly. Show the card with one symbol, then the card with two symbols, then the card with three, etc.

Stop testing the examinee when the examinee has made errors in two consecutive sequences or when s/he has completed the test in its entirety.

When the examinee has gone as far as s/he can in the Visual Modality* assessment, the instructor totals the examinee's answers on the Visual Modality* check sheet, giving one point for each symbol the examinee answered correctly. Proceed to the Auditory Modality* Assessment upon completion of this test.

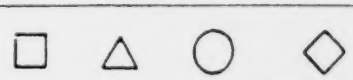
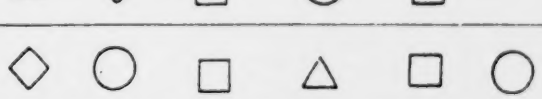
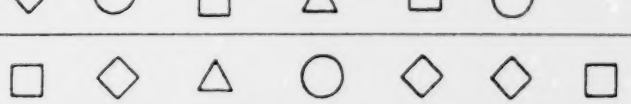
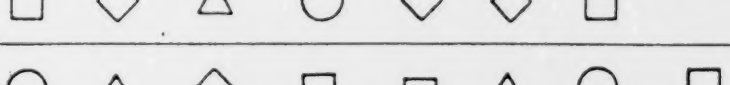
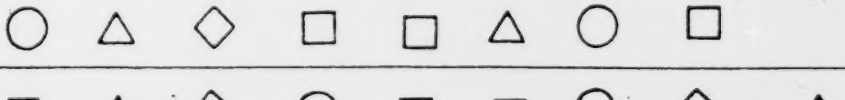
Instructions to the Student

"I am going to show you a card. The card has pictures of different shapes on it. Look at those shapes. When I take the card away, take the loose shapes on the table in front of you and arrange them in the same order as the card I just showed you."

"There are only four (4) shapes. They appear several times. The number of shapes you see each time will increase gradually. Continue to make what you see until I tell you to stop."

VISUAL MODALITY*

CHECK SHEET

Row 1	
Row 2	
Row 3	
Row 4	
Row 5	
Row 6	
Row 7	
Row 8	
Row 9	

TOTAL CORRECT ☐

AUDITORY MODALITY* ASSESSMENT

Instructions to Instructor

On the Auditory Modality* Assessment use the same cards as were used in the Visual Modality* Assessment, but this time instead of showing the examinee the card, the instructor reads to the examinee the symbols from each card. The examinee is then asked to reconstruct what he has heard using the symbols on the table before him/her.

The instructor does not repeat what s/he has read; s/he reads it just once. The instructor does not allow the examinee to see the cards from which s/he is reading.

After the examinee finishes reconstructing each card, the instructor uses the Auditory Modality* Assessment check sheet to mark through each symbol the examinee answered correctly. The instructor leaves unmarked any incorrect answers. Incorrect answers are those in which the examinee has left out symbols or reversed symbols in his reconstruction process.

The instructor continues in the same manner. From each new card, s/he reads the symbols, s/he allows the examinee reconstruction time, and then s/he marks the examinee's check sheet.

The instructor stops testing when the examinee has made errors in reconstructing two consecutive sequences or when the examinee has finished reconstructing the set of nine (9) cards.

When the examinee has gone as far as s/he can in the Auditory Modality* Assessment, the instructor totals the examinee's answers on the check sheet, giving one point for each correct symbol.

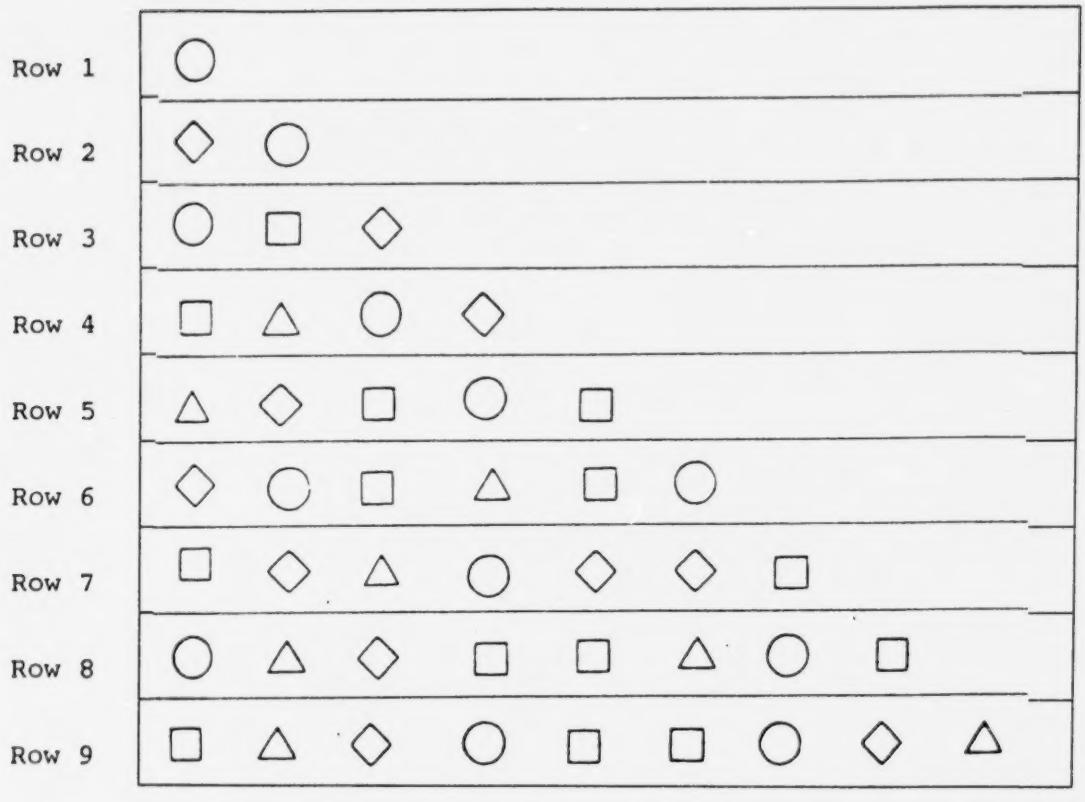
Instructions to the Student

"This time I will read aloud the names of shapes. I shall read them to you only once, so listen. When I finish reading, take the loose shapes on the table before you and make the pattern that I have just read. Make sure that you put the shapes in the exact order in which I read them."

"I shall gradually increase the number of shapes read to you. You continue to make what you hear until I tell you to stop."

AUDITORY MODALITY*

CHECK SHEET



TOTAL CORRECT

INTERPRETATION OF SCORES

Upon completion of both the Visual* and Auditory Modality* Assessments, the instructor should compare the scores of the two tests. If there is as much as five points between the two Modality* Assessment scores, the modality* with the higher number is the stronger or dominant modality*. That is to say, if the examinee's visual* score was five or more points higher than his/her auditory* score, that individual could be considered a visual* learner. Conversely, if the examinee's auditory* score was five or more points higher than his/her visual* score, that individual could be considered an auditory* learner.

If there is a smaller difference than five (5) between the two modality* assessments, the person is thought to have mixed modality* strengths.

Primary Learning Modality*
Informal Teacher Checklist

I. Your student may be a visual* learner if s/he...

_____ • is quiet and observant in new situations
_____ • watches to see what others do before beginning a task
_____ • likes to watch you demonstrate a task
_____ • notices changes quickly
_____ • is very conscious of visual detail
_____ • tends to make plans, be organized
_____ • doodles on papers
_____ • has many sight words but has trouble "sounding out" words
_____ • takes notes; writes notes to self

II. Your student may be an auditory* learner if s/he...

_____ • is a good listener
_____ • often engages in conversation
_____ • moves lips and/or whispers to self when reading
_____ • uses phonics to "sound out" the words
_____ • talks to self to work through problems or discusses possible solutions with you
_____ • memorizes by oral repetition

III. Your student may be a kinesthetic* learner if s/he...

_____ • prefers hands-on activities
_____ • is physical in interactions with others (i.e. hand shaking, arm touching, back patting, standing close)
_____ • fidgets a lot during lectures and/or reading activities
_____ • often seems to be "in own world"
_____ • does not become actively involved in either visual or auditory lessons
_____ • uses gestures
_____ • wants to demonstrate; "let me show you"
_____ • prefers to change activities frequently

Primary Learning Modality*
Informal Student Checklist

Check the <u>one</u> statement in each group which best describes you.

_____ 1. I like art better than music.
_____ 2. I like music better than art.

_____ 1. I doodle a lot.
_____ 2. I sing to myself often.
_____ 3. I fidget often in class.

_____ 1. I remember faces better than names.
_____ 2. I remember names better than faces.

_____ 1. I remember best what I see in pictures, charts, and graphs.
_____ 2. I remember best what I hear and say in class.
_____ 3. I remember best what I do.

_____ 1. I prefer to get the latest news by reading the newspaper.
_____ 2. I prefer to get the latest news by listening to the radio.

_____ 1. I would prefer to put together a model by reading the directions first.
_____ 2. I would prefer to put together a model by listening to someone explain how to do it.
_____ 3. I would prefer to put together a model by moving the pieces around by myself.

_____ 1. I am more distracted by movements than by noises around me.
_____ 2. I am more distracted by noises than by movements around me.

_____ 1. I prefer to give a card to show someone how much I love him/her.
_____ 2. I prefer to tell someone how much I love him/her.
_____ 3. I prefer to show someone how much I love him/her.

_____ 1. To remember how to spell a word, I see it in my mind's eye.
_____ 2. To remember how to spell a word, I sound it out.
_____ 3. To remember how to spell a word, I write it down several times to get the right "feel".

KEY

#1 visual* modality

#2 auditory* modality

#3 kinesthetic* modality

HOW DO I TEACH LEARNING DISABLED STUDENTS?

Your skill as a teacher impacts directly upon the achievement of your students. A skilled teacher remains so by continually gathering new ideas and refining practices for the benefit of all. Your learning disabled student, just as each member of your class, will appreciate your consideration of the following practical suggestions for teaching adults, addressing self-esteem, planning programs, and helping your students "learn how to learn."

Practical Suggestions for Teaching Adults ... Anybody, Anytime, Anywhere

Think of this list (adapted in part from William A. Draves' *How to Teach Adults* and Peter J. Murk's "Tested Techniques for Teaching Adults") as comprising a menu from the "Ideal World Restaurant". Come hungry, yet employ your professional knowledge/judgement about yourself and your students when ordering!

- Find out what interests your student (with respect to your subject matter as well as life in general) through observation, interviews, discussion, and informal questioning.
- Find out how each student is unique and respect those differences. Use modality and learning style inventories!
- Find out how much the learner already knows and start there. Then move toward mutually agreed upon goals.
- Combine the information gathered from the previous steps to plan appropriate learning experiences.
- Communicate to each student that you value him/her through smiling, listening, eye contact, and physical proximity.
- Be humble. If you're not sure of something, admit it but then find out and follow through for that student.
- Build and maintain a secure and positive learning climate by emphasizing each learner's strengths and acknowledging individuality.

- Address the social needs of your group. Provide or allow for beverages and snacks. Schedule breaks and encourage interpersonal interaction.

- Plan learning experiences that focus on adults, using age-appropriate themes and materials.

- Provide information and accept responses from students in multi-sensory formats:
  - visuals to complement lecture
  - "hands-on" materials
  - student can tape record assignments, etc.

- Allow each student to experience a variety of individual, paired, small group and whole group assignments. Be aware of individual preferences.

- Use "right brain" techniques:
  - Encourage visualization.
  - Incorporate music.
  - Teach students how to "web" or "map" thoughts and concepts.
  - Try role playing; improvisations.

- Ensure that the student knows what s/he is expected to learn, its relevancy, and how s/he will demonstrate that s/he has learned it.

- Employ "mastery learning" techniques:
  - Specify a particular skill.
  - Set a standard for mastery.
  - Teach (and re-teach if necessary) using a variety of methods until the student demonstrates mastery.
  - Move ahead to another objective.

- Expect that the student will leave each class with at least one new skill or piece of knowledge. Share your expectations at the beginning of class, then summarize the learner's progress mid-way through and his/her success at the end of the class.

- Use warm-ups which relate to the new lesson at the beginning of the class:
  - a group review of a previous lesson
  - individual application of skills
  - brainstorming

- Use questions from all levels of Bloom's Taxonomy* for ALL students.

- Allow for plenty of time after questioning so that the adults have time to think through and consider ideas and possible consequences and ramifications. Call on a student AFTER the question has been asked and the "wait time" has passed.

- Give students ample opportunities for practice of new skills - in various formats. Learning Disabled students in particular need to "overlearn" new skills in order for them to become automatic.

- Reinforce students for their accomplishments:
    - Put check marks on correct answers and do not grade until errors are analyzed and corrected - then write "corrected to 100%!"
    - Give descriptive feedback about a specific success ("You read that so fluently!") rather than only a general comment ("Good job!").
    - Use the "One Minute Manager" technique of catching the student doing something right and telling him about it - positively.

- Handle each student's difficulties positively:
    - Emphasize what s/he does well first.
    - Address the situation ("I see that these fractions are not in simplest form.") rather than the person ("You forgot to reduce these fractions.")

- Involve the student in the evaluation of his/her progress:
    - learning portfolios
    - check off mastered learning plan objectives (the student should have a copy)

- Conclude class with an activity that encourages reflection about what was learned:
    - individual summary journals
    - discussions of how learning will be applied to real life
    - self-graded "quiz"

SELF-ESTEEM

In their article "Adults with LD in the 1990's", Ryan and Price assert,

> "Many professionals now believe that psychosocial skills (e.g., how adults with learning disabilities perceive themselves and, as a result, relate to others on a daily basis in their environment) is one of the single most important factors in adult life. both the literature and our own experience clearly agree that psychosocial problems are critical hurdles if adults with learning disabilities are to accomplish their goals... in school"

A student's self-esteem (his feeling about himself) pales in the shadow of learning disabilities. Use this checklist to help you determine if your student suffers from low self-esteem.

Your student...

is self-critical (i.e. "I never could do math." or "I can't remember anything.") _____

is very sensitive about his performance _____

is a poor risk-taker who is afraid to make mistakes _____

does not hold eye-contact well _____

has a poor attitude toward learning _____

places blame on others (i.e. "My parents thought I was dumb" or "Teachers told me I couldn't learn") _____

makes many erasures/corrections _____

is hesitant to respond _____

appears unmotivated _____

is reluctant to apply new skills _____

gives up readily on assignments _____

seeks out reassurances _____

Do these statements characterize your student? Assisting your student to develop and maintain a positive definition of himself as a learner is arguably the most important contribution you can make to his life. Read on to discover what you can do.

Try the following techniques to foster self-esteem:

- Set a tone of acceptance within the class. Look for each person's best work and reduce emphasis on competition and perfection.

- Emphasize individual differences and that everyone has strengths and weaknesses.

- Model an acceptance of your own weaknesses (through humor), pride in your own accomplishments, and a willingness to say, "I don't know the answer (or how to do that), I'll look it up and get back to you!"

- Demonstrate that you value your student through physical proximity and by engaging in casual conversations.

- Have each student pair up with an "absence partner" who will gather material, take notes and possibly call the absentee. This helps to foster a sense of importance and belonging.

- Reduce threatening classroom procedures such as assigning oral reading, announcing test score ranges, or overemphasizing the success of a particular student.

- Have students keep "open response journals" where they react to aspects of the class ("I'm really frustrated about fractions" or "Wow! I understand graphs!") and you respond ("I know you'll master those fractions - let's work one-on-one next time!" or "Great! Will you help Sam with this week's graph?"). De-emphasize spelling - encourage students to write what they feel.

- Encourage the student to find a mentor.

- Teach relaxation and stress management techniques.

- Incorporate self-esteem building activities into your curriculum (There are several trade workbooks available; South-Western Publishing Company has a good one for ABE)

- Use peer tutoring and ensure that each student gets an opportunity to be a tutor as well as a learner.

- Deliver praise and constructive criticism consistently and privately to each of your students.

- Encourage positive self-talk. Have your student practice saying "I'll do the best I can" and imagine himself succeeding at each task.

- Help your student process the success experience by saying to himself, "I am a success! I accomplished this through hard work, not giving up..." or substitute whatever fits.

- Call on a student when he is most likely to be correct, and allow plenty of "wait time".
- Break new concepts into small, manageable chunks.
- Assign short exercises which you feel certain the student can do.
- Give immediate feedback. Greet correct responses with exclamations such as "Exactly!", "Wow!", and meet mistakes with "Look at this one again" or "A better way to do that might be..." etc.
- Organize daily work in the same format as will be used on the test.
- Encourage your student to keep trying. However, when you see that frustration is about to set in, conclude that lesson with a genuine compliment about his progress and then transition to something s/he will master.
- When marking papers, check the correct answers and leave the incorrect ones blank or circle them. Do not place a grade on it until the student has made corrections. Then you can write "Corrected to 100%!"
- Involve the student in writing realistic, short-term goals. Reward the student as he reaches each goal, and allow him/her to check it off on the learning plan.
- Reinforce the student for improvement and have him record it on a graph or chart so that he has tangible evidence of success.

Your learning disabled student has had countless experiences of putting great effort into tasks with results which are disappointing to him and others. S/he has failed or perceived failure far more often than not. When you teach with your students' self-esteem in mind and student success as your goal, you are sure to have students who can't wait to attend the next class!

PROGRAM PLANNING

Under the current MAPP (Maryland Adult Performance Program) guidelines, we are required to design individualized learning plans (ILPs) for our students. The process of devising and implementing each plan, if handled tactfully, can be a mutually rewarding experience for teacher and student. You will find a sample format and suggestions for a successful collaboration included in this section.

DESIGNING AN ILP

Use the information which you've gathered from your interview, observations, informal assessments and perhaps a formal evaluation to determine your student's academic strengths and needs. List as many of each as possible, but always strive to have an equal number (or more strengths than needs!). Involve the student at this point to add to that list and to determine the goal. The goal is a general statement of long-term interest, but one which you both expect to be achieved within the year. For example: "To pass the GED" may need to be narrowed to "To read and comprehend at the GED level" or "To improve functional math skills." You and your student can choose objectives from the following MAPP Scope and Sequence of Basic Skills, or write your own. Of course you, the teacher, are best equipped to choose educationally appropriate objectives and to create individualized ones, but the value of the student's involvement cannot be underestimated. It fosters a spirit of open communication, cooperation, and commitment that will last throughout the year.

The methods can be chosen or designed to match the student's interests and learning style. Some suggested strategies and methods follow the Scope and Sequence. They are correlated to the MAPP objectives and the suggestions are labeled: "V" for visual*, "A" for auditory*, and "K" for kinesthetic*. This is just for informational purposes...it should not unnecessarily limit your choices. Of course you have developed your own methods for teaching these skills and you will use them as well!

Evaluation of the ILP should be pre-planned. Will you test the student and expect a certain level of mastery? Will you use portfolios or teacher observation as assessment tools? Will the student decide when an objective has been met based on his/her own criteria for success? In any case, it is crucial to measure progress.

INDIVIDUAL LEARNING PLAN

Name:_____ Date:_____

Strengths:_____

Needs:_____

Goal:_____

Objective:_____
Method(s):_____

Objective:_____
Method(s):_____

Objective:_____
Method(s):_____

Objective:_____
Method(s):_____

Objective:_____
Method(s):_____

Objective:_____
Method(s):_____

Objective:_____
Method(s):_____

Objective:_____
Method(s):_____

Evaluation:_____

Additional Information:_____

MAPP

SCOPE AND SEQUENCE OF

BASIC SKILLS

The following is the scope and sequence for the basic skills in listening, speaking, reading, writing, and math. Students are pretested to determine basic skill needs. Individual learning plans are developed to address identified needs which can be selected from the listing below:

L. **LISTENING** - The student will:

L.1. **Listen to recognize words**
- Distinguish auditory clues (rhythm, pattern)
- Identify and distinguish sounds
- Distinguish words
- Recognize rhyming words

L.2. **Listen to develop vocabulary**
- Identify word meanings
- Apply context clues

L.3. **Listen to synthesize information**
- Follow directions
- Determine main idea
- Recall factual detail
- Discriminate between main ideas and details
- Take notes
- Organize ideas in a logical order
- Evaluate information

S. **SPEAKING** - The student will:

S.1. **Speak to be understood**
- Speak clearly
- Use inflection
- Use standard English grammar

S.2. **Speak to get and give information**
- Give information about self
- Ask a question
- Answer a question
- Provide factual detail
- Relate detail in logical sequence
- Give directions

S.3. **Speak to explain**
- Articulate a problem
- Paraphrase, summarize information

S.4. **Speak effectively**
- Describe feelings
- Express an opinion
- Persuade

R. **READING** - The student will:

R.1. Demonstrate reading readiness
Recognize alphabet
Recognize numerals
Demonstrate left to right progression
Identify basic sight vocabulary
Discriminate visual clues
Discriminate auditory clues (rhythm, pattern)
Demonstrate directional vocabulary (oral) - (i.e., under, through, first, last)
Sequence pictures
Categorize pictures
Establish sound symbol relationship

R.2. Read using word recognition skills

R.2.1 Analyze phonetically
Identify initial consonants
Identify final consonants
Identify long and short vowels
Identify letter combinations
Identify word patterns

R.2.2 Analyze structurally
Recognize root words
Recognize prefixes
Recognize suffixes
Separate syllables
Identify compound words
Recognize possessives
Recognize contractions
Differentiate singular and plural words
Recognize abbreviations

R.2.3 Develop vocabulary
Distinguish positional words (i.e. over, under)
Use synonyms, antonyms, and homonyms
Solve word analogies
Utilize context clues
Identify content related sight vocabulary

R.3. Read using comprehension skills
Recognize punctuation signals (. , ! ?)
Classify information
Define main idea
Identify supporting details
Recall details
Develop sequences
Make inferences
Compare/contrast information
Distinguish fact from opinion
Distinguish cause from effect
Draw conclusions
Summarize information
Identify figurative language (idioms, similes, metaphors)
Make predictions
Evaluate information

R.4. **Apply study skills**
Alphabetize words
Follow directions
Skim and scan information
Locate information (dictionary, reference booksets, table of contents, index)
Organize information (notetaking-directed reading activity)

R.5. **Expand reading**
Identify a variety of reading materials such as - novels, short stories, mysteries, plays, poetry, etc.

W. **WRITING** - The student will:

W.1. **Demonstrate legible handwriting**
Form upper case letters
Form lower case letters
Write a signature
Form numerals
Form symbols

W.2. **Demonstrate use of correct spelling**
Spell a list of sight words
Write plural of words
Use prefixes and suffixes
Spell homonyms
Spell contractions
Spell abbreviations
Spell possessives
Spell commonly confused or misspelled words
Apply common spelling rules

W.3. **Demonstrate use of punctuation marks**
Use sentence ending punctuation
Use commas
Punctuate abbreviations
Use quotation marks
Use apostrophes
Use colons
Use semi-colons
Use hyphens

W.4. **Demonstrate the use of capitalization**
Capitalize the first word of sentences
Capitalize proper nouns and proper adjectives
Capitalize titles
Capitalize the word "I"
Capitalize salutations and closings in letters
Capitalize the first spoken word of a quotation

W.5. **Demonstrate the use of correct grammar**
Identify parts of speech
Use subject/verb agreement
Use correct pronoun agreement and form
Use appropriate verb tenses
Use irregular verb forms

Use contractions
Use possessives

W.6. Demonstrate the use of correct sentence structure
Distinguish between a sentence and a phrase
Identify subject and predicate
Recognize four kinds of sentences (Dec., Inter., Imp., Excl.)
Identify types of sentences (simple, compound, complex)
Use modifiers

W.7. Demonstrate composition skills
Write a sentence
Write a paragraph
Develop a simple outline (topical, phrase, sentence)
Construct a personal letter
Construct a business letter
Use basic proofreading skills

M. MATHEMATICS - The student will:

M.0. Demonstrate precomputational skill
Recognize numerals
Establish one-to-one correspondence
Demonstrate place value
Read numerals
Write and identify numerals
Explain math vocabulary

M.1. Compute using whole numbers
Add whole numbers
Subtract whole numbers
Multiply whole numbers
Divide whole numbers
Perform multiple operations using whole numbers
Estimate and round whole numbers
Solve whole number word problems

M.2. Compute using decimal fractions
Add decimal fractions
Subtract decimal fractions
Multiply decimal fractions
Divide decimal fractions
Perform multiple operations using decimal fractions
Convert decimal fractions to common fractions or percents
Estimate and round decimal fractions
Solve decimal fraction word problems

M.3. Compute using fractions
Recognize fractional amounts
Understand fraction vocabulary
Add common or mixed fractions
Subtract common or mixed fractions
Multiply common or mixed fractions
Divide common or mixed fractions
Perform multiple operations using fractions
Convert common or mixed fractions to decimal

fractions or percents
Solve fractions word problems

M.4. Compute using percents
Apply a percent to determine amount of discount
Apply a percent in a context not involving money
Calculate percents
Convert percents to common, mixed, or decimal fractions
Calculate interest
Solve percent word problems

M.5. Use expressions, equations, or formulas
Recognize or evaluate simple consumer formulas
Recognize or evaluate simple geometric formulas
Recognize or evaluate simple algebraic formulas

M.6. Use measurement
Convert U.S. Customary and Standard International Metric System of measurement
Measure linear dimensions, geometric shapes, or angles
Measure area and volume of geometric shapes
Use measurement instruments
Interpret scale drawings
Calculate with units of time
Solve measurement problems

M.7. Interpret data from graphs or compute averages
Interpret data given in bar graph
Interpret data given in a picture graph
Interpret data given in a circle graph

STRATEGIES AND METHODS

Correlated with the MAPP Scope and Sequence of Basic Skills

L. LISTENING

- Encourage your student to have his/her hearing checked!
- Evaluate the level of difficulty of the information to which the student is expected to listen. Provide success experiences and add on challenges as the student becomes ready.
- If auditory skills are weak, provide visual "back up" and then gradually decrease that support. (V)
- Place the student in the location most appropriate for him/her to hear what is being said. (A)
- Stand near the student when speaking to the class.
- Ensure that the student is attending to the source of information (e.g., making eye contact, looking at assignments). (V)
- Reduce distracting stimuli (e.g., noise and motion in the classroom) in order to enhance the student's ability to listen successfully. (A)

L.1. LISTEN TO RECOGNIZE WORDS

- Identify the speech sounds the student has difficulty distinguishing. Spend time each class having the student listen to the sounds enunciated and have him/her use the sounds in conversation. (A)
- Emphasize or repeat similar blends, similar vowel sounds, similar consonant sounds, rhyming words, etc. (A)
- Explain and demonstrate how similar sounds are made (e.g., where the tongue is placed, how the mouth is shaped, etc.) (K)
- Have the student watch the lips of the person speaking to him/her. (V)

- Have the student listen to a series of directions and act out the ones that make sense (e.g., bake your head, rake your head, shake your head). (K)

- Have the student keep a notebook with pictures of words that rhyme. (V)

- Use pictures of similar sounding words in order to help the student recognize the difference (e.g., if s/he has difficulty differentiating /ch/ and /sh/ words such as "chip" and "ship"). (V)

- Have the student make up poems and tongue twisters using blends, similar vowel sounds, similar consonant sounds, and rhyming words. (A)

L.2. LISTEN TO DEVELOP VOCABULARY

- Pause during speaking or oral reading to highlight new words and discuss them. (A)

- Demonstrate the meaning to new words through the use of gestures. (V)

- Encourage the student to question you and classmates about unfamiliar words.

- Have the student listen to the (taped) narration of a book and identify unfamiliar words to put in a personal dictionary/thesaurus. (A)

- Have the student tape and listen to his/her own speech. Discuss synonyms for common vocabulary. (A)

L.2. LISTEN TO SYNTHESIZE INFORMATION

- Deliver information on a one-to-one basis. Gradually include more students in the listening group with the student as s/he demonstrates the ability to listen successfully.

- Stop at key points when delivering directions, explanations, or instructions in order to determine student comprehension.

- Teach signal words (e.g., first/second, before/after, especially etc.). (A)

- Teach the students how to use graphic organizers* to facilitate listening comprehension. (V)

- Teach students to "image", to "picture" the ideas being listened to in order to bring the listening experience to life. (V)

- Use Multiple Response Technique, in which students hold up response cards in reaction to questions posed by teacher. The response cards may be "yes/no" or "true/false" or various answer choices suited to the listening situation. (K)

- Involve the students in paired retelling. After listening to directions or a read-aloud, they are given a structured opportunity to reproduce in their own words what was heard. The more practice a student has with this skill, the more at ease s/he will feel and benefits s/he will receive. (A)

S. SPEAKING

Be certain to act as a model for the student to imitate by speaking clearly, concisely, with appropriate rate and in complete thoughts.

•S.1. SPEAK TO BE UNDERSTOOD

- Pair the student with a peer who will act as a model for appropriate speech and have them do some assignments together. (A)

- Develop a list (with the student/class) of attributes related to good speaking (e.g., rate, diction, volume, inflection, grammar, vocabulary) and have the student identify one characteristic to master before tackling another.

- Demonstrate appropriate and inappropriate ways of speaking and have the student critique each example. (A)

- Allow the student to speak without being interrupted or hurried.

- Have the student keep a list of times and/or situations in which s/he has particular difficulty with speech (e.g., when s/he is nervous, embarrassed, etc.). Discuss the reasons and seek solutions to the difficulties experienced (e.g., relaxation techniques of deep breathing; tensing and relaxing muscles). (K)

- Engage the student in one-to-one conversational speech while providing him/her with evaluative feedback to facilitate correct speech. (A)

- Tape record a spontaneous monologue given by the student. Transcribe his/her speech from the tape and show the student exactly what s/he said. Have the student suggest improvements and practice the suggestions. (V)

S. 2. SPEAK TO GET AND GIVE INFORMATION

- Have the student role play various situations in which fluent, clear speech with attention to detail is important (e.g., job interview, police incident report, job inquiry). (A/K)

- Have the student keep a journal of descriptive, elaborative thoughts and statements s/he can practice and use while speaking. (V)

- During informal conversations, paraphrase the student's speech to include a larger speaking vocabulary (e.g., the student says, "The T.V. show was good." You say, "I'm glad you found it to be so entertaining!"). (A)

S. 3. SPEAK TO EXPLAIN AND
S. 4. SPEAK EFFECTIVELY

- Have the student use a graphic organizer,* a "fill in the blanks" outline or labeled note cards to plan a speech with one of MAPP's objectives as the goal: to articulate a problem, summarize information, describe a feeling, express an opinion or persuade. The student can practice and deliver. (V/A)

- The students can use graphic organizers or "fill in the blank" outlines to respond constructively to each others' speech. (A/V)

R. READING

R. 1. DEMONSTRATE READING READINESS

- Use the VAKT* approach to teach the alphabet, numerals, and basic sight vocabulary. (V/A/K)

- Review the musical version of the alphabet. (A)

- Use a language master or computer with voice to pair the sound of a letter (or letters) with the corresponding symbol. (A)

- Assign the student a sound/symbol relationship. Have the student use a highlight marker to identify each word in a passage in which the sound/symbol relationship appears. (V)

- Identify a letter. Have the student listen for the sound made by that letter and identify the sound/symbol relationship each time s/he hears the sound. (A)

- Draw arrows and use a finger, pencil, or "window card"* as a guide for moving left to right along a line of print. (V/K)

- Cut up comic strips for the student to practice sequencing, and newspaper or magazine pictures for categorizing. (V)

R. 2. READ USING WORD RECOGNITION SKILLS

- Begin by teaching phonetically regular words which are already in the student's oral vocabulary. (A)

- After teaching each phonics skill, provide ample practice with high interest reading material. (A/V)

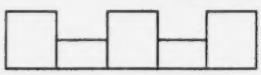
- Encourage the student to scan newspapers and magazines to highlight learned phonic elements. (V)

- Teach the student to attend to detail by filling in an omitted letter or letters from a word in isolation (e.g., p_ease, __ease, pl_ se, plea__, pleas_) and then in context. (V)

- Have the student keep a journal of the word recognition skills and word lists which s/he has mastered. Encourage the use of them in writing. (V)

- Encourage the student to involve his/her body in rhythm with the word patterns. (K)

- Provide practice with matching a word (e.g., hotel) with its configuration:



. (V)

- Have the student dictate stories which are then transcribed with emphasis placed on the word recognition skill which is being taught. (A/V)

- Use the Four-Step-Sure-Step* strategy for vocabulary development. (V/A)

- Xerox a reading selection. Leave the first few sentences intact, then white out every "nth" word (the more space between blanks, the easier). The student will use the context clues to fill in the blanks. The new passage should retain the original's meaning, without necessarily the <u>exact</u> words. (V)

R. 3. READ USING COMPREHENSION SKILLS

- Read classic and popular literature aloud to your students. (A)
- Use taped books so that the student can read along as s/he listens. (A/V)
- Have the student read high interest signs, advertisements, notices, etc., from newspapers, magazines, movie promotions, etc. (V)
- Have the student read high interest/low vocabulary selections. (V)
- Use a marker to highlight important points of student's reading selection, prior to his/her reading. (V)
- Ask student to highlight main ideas. (V)
- Outline the reading passage for the student, using words and phrases consistent with his/her vocabulary. (V)
- Have the student jot down important words and phrases as s/he reads. (V)
- Have the student fill out graphic organizers* while reading. (V)
- Take dictation from the student. Have the student read it and answer comprehension questions. (A/V)
- Have the student orally paraphrase a selection after reading it. (A/V)
- Provide the student with a checklist of steps to follow before, during, and after reading. Teach and have the students practice one step at a time. See pages 59 and 62. (V)
- Allow enough time for the student to read the selection twice, emphasizing comprehension rather than speed. (V)

- Read simultaneously (orally) with the student at a normal pace. Instruct him/her not to dwell on unknown words, rather to keep up with your rhythm. Doing this once in a while will help cure the comprehension crushing word-by-word reading habit. (V/A)

- Have student role play, act out, or make something from the reading selection to demonstrate comprehension. (V/K)

- Allow the student to experiment with reading large print. (V)

- Try laying colored transparency film over the page to heighten contrast. Different colors work for different people!

R. 4. APPLY STUDY SKILLS

- Have the student use looseleaf paper and a notebook to create a personal dictionary. One letter per page with no further alphabetization is fine. Have the student enter a phonetic respelling and the definition/sentence which is most meaningful to him/her. (V)

- Allow for opportunities for the student to give and follow verbal, written, and demonstrated directions. (V/A/K)

- Teach the SQ3R method (page 58). (V/A)

R. 5. EXPAND READING

- Allow the students to experience each genre through multi-sensory examples: audio tapes, videos, slides, movies, theater productions, and of course the printed word. (V/A/K)

W. WRITING

Writing is an integral part of literacy instruction and should not be separated from your reading lessons. Reading is the process of gaining meaning from print; writing is the process of putting meaning into print. Encourage your student to write something every day, be it a letter, name, word, list, sentence, note or part of a form. The more meaningful the assignment, the better a student's writing will be.

W. 1. DEMONSTRATE LEGIBLE HANDWRITING

- Allow the student to experiment with a variety of writing implements of different thicknesses. S/he can decide how much friction s/he prefers. (K)

- Have the student try writing on different types of paper (smooth, rough, shiny, dull, colored, ruled, heavily lined, raised lined, graph) to determine a preference. (V/K)

- If you both decide that remediation of letter formation is needed, try the following:

- Provide a color-coded model of each letter/number: a green dot and line could show the first stroke, yellow or orange for the second stroke and red for the third. For a two-stroke word you might use just green and red. (V)

- Teach letters of similar strokes as a unit; discuss their common features (i.e., the c stroke is used in a, d, e, g, o, and q). (V/A)

- Encourage the student to practice letter/numeral formation on the chalkboard, using large arm movements as a memory aid. (V/K)

- Use the VAKT technique to teach signature writing. (V/A/K)

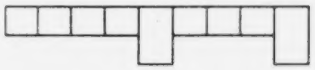
- Teach symbols in context, as they become necessary for the student's writing.

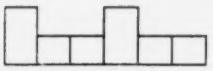
W. 2. DEMONSTRATE USE OF CORRECT SPELLING

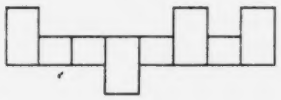
- Help your student realize the connection between reading and spelling. As soon as the student can blend two or three letters to make words (reading), teach him to unblend them (spelling) by enunciating each sound. (A)

- Begin with high interest sight vocabulary words to try the following techniques:

- Match the word to its configuration:

doctor 

hospital 

emergency  (V)

- Match scrambled to unscrambled words. (V)
- Look at a word list to supply a missing letter or letters: d_ct_r, _m_rg_nc_. (V)
- Encourage the student to "say it funny" while attempting to spell a word, e.g. Wed/nes/day, li/bra/ry. (A)
- Have the student spell the word in rhythm (especially those with confusing endings such as -tion, -tch, -dge, -ial). (A)
- Reinforce the spelling of words by focusing on words with similar letter patterns, e.g., right, bright, fight. (V)
- Emphasize prefixes, root words, and suffixes as the student focuses on the common visual elements. Example: pay, repay, payment, payable (V)
- Teach mnemonic devices (memory aids) such as:
- Finding little words within larger ones and making sentences to connect them, e.g., "island - an island is land" (V/A)
- Use each letter within a word to form a sentence: "lease = let each apartment stay empty" (V/A)
- Use rhymes, chants, or nonsense verses such as "Miss-iss-ippi" and "Does your bare ass embarrass you?" (A)

- The students should make up their own memory strategies.
- Use the VAKT* approach. (V/A/K)
- Have the student keep a personal list of frequently misspelled words.
- Use a Franklin Speller

W. 3. DEMONSTRATE USE OF PUNCTUATION MARKS

- Teach the student one form of punctuation at a time before moving on to another.
- Have the student dictate an anecdote to you. Transcribe it and then have the student explain why a certain form of punctuation is used (or use commercial reading material for this). (V/A)
- Copy the sentences from the student's dictation (or commercial reading material), omitting the form of punctuation the student is studying. The student can then punctuate the passage. (V)
- Help the student develop chants and nonsense verses to remember the rules. (A)
- Have the student keep a personal list of troublesome punctuation rules and examples. (V)
- Encourage the student to say the sentences aloud in order to "hear" the pauses and vocal intonations. (A)
- Require the student to correct punctuation errors in his/her own work. (V)

W. 4. DEMONSTRATE THE USE OF CAPITALIZATION

- Instruct on one rule of capitalization until the student masters it before moving to another.
- Help the student develop chants and nonsense verses to remember the rules. (A)
- Have the student practice reading and writing words which are always capitalized. (V)

- Highlight words in the student's dictated passages or commercial reading material and have the student explain why they are capitalized. (V/A)

- Transcribe a passage in lower case, and have the student make corrections. (V)

- Require the student to correct capitalization errors in his/her own work. (V)

W. 5. DEMONSTRATE THE USE OF CORRECT GRAMMAR
W. 6. DEMONSTRATE THE USE OF CORRECT SENTENCE STRUCTURE

- Identify the error(s) most commonly made by the student and work on correcting one at a time.

- Highlight examples of the skill being studied in the student's reading assignments. (V)

- Create cards with nouns, phrases, and action verbs of personal significance to the student. Create cards with helping verbs. Label the corner of each card with the name of the part of speech. Have the student manipulate the cards to create sentences. The student should copy each sentence, inserting correct capitalization and punctuation, AFTER reading it aloud to ensure it makes sense. The student can practice labeling the subject and predicate. (V/A/K)

- Use sample sentences from the student's own journal writing or dictation to help teach the types of sentences and to highlight CORRECT grammar. It is not recommended to find errors in this context; it will suppress creativity. (V/A)

- Supply the student with proofreading exercises to practice identification of the learned skill(s). (V)

W. 7. DEMONSTRATE COMPOSITION SKILLS

- Begin by transcribing sentences and paragraphs from the student's dictation. (A/V)

- When the student begins to write for classroom assignments, start with simple tasks such as names, addresses, phone numbers, shopping (and other) lists, and sentence completion activities. (V)

- Incorporate journal writing to promote creativity - you can give the "writing prompt" for students to respond to (e.g., "On a rainy day...", "The President should...") NOTE: When you respond to the student's writings, it is usually advised to address content, not spelling/grammar. (V)

- Use the jot outline* and graphic organizers* to help the student learn to outline. (V)

- Devise steps to be performed before, during, and after writing. (V)

- Develop and teach the skills in a proofreading checklist for the student to refer to (e.g., Topic, Audience, Purpose, Format, Capitalization, Punctuation, Grammar, Spelling).

M. MATHEMATICS

- Provide the student with concrete experiences to help him/her learn and remember math. Use real money and other "adult" items such as poker or bingo chips, cigarettes, and paper clips to form groupings to teach math. (V/K)

- Use the calculator to reinforce learning. The student can concentrate first on the concept, without worrying about the calculation, or s/he can use the calculator to check answers. (V/K)

- Provide computer practice with software that gives immediate feedback to students. (V/K)

- Allow the student to be tutored by peers, and then allow the student to tutor others when s/he has mastered a concept. (V/A)

- Discuss and develop a list of words and phrases which signal the operation to be used in a word problem:

addition -	together, altogether, sum, in all, both, gained, received, total won, saved, etc.
subtraction -	difference between, from, left, how many (more or less), how much (taller, farther, heavier), withdrawal, spend, lost, remain, more, etc.
multiplication -	area, each, times, product, double, triple, twice, etc.
division -	into, share, each, average, monthly, daily, weekly, yearly, quotient, half as many, etc. (A/V)

- Provide the student with a checklist to follow in solving math word problems (e.g., what information is given what question is asked, what operation(s) is used.) (V)

- Teach the student how to write a number sentence from a word problem by helping him/her make up word problems for number sentences. (V/A)

- Have the student talk through the math problems as s/he solves them in order to identify errors. (A)

M. O. DEMONSTRATE PRECOMPUTATIONAL SKILLS

- Use high interest manipulatives for counting (one-to-one correspondence) practice such as poker chips, coins, cigarettes. (V/K)

- Use the VAKT* approach to teach the reading and writing of numerals. (V/A/K)

- Apply skills to functional situations such as reading temperatures, digital clocks, calendars, coupons. (V)

- Use money to teach place value - exchange 10 pennies for one dime, call 56¢ five dimes and six pennies. (V/K)

- Provide graph paper or turn lined paper sideways to help the student visualize place value columns. (V)

M. 1. COMPUTE USING WHOLE NUMBERS

- Have the student solve math problems by manipulating objects and by stating the process involved. (V/A/K)
- Teach the Tic-Tac-Toe* method. (V)
- Develop math facts reference sheets for each operation so that the student can solve problems "independently". (V)
- Provide varied drill and practice for overlearning* of math facts and procedures (e.g., flashcards and dittos, "chanting" - setting them to music, and practicing while doing a physical activity such as squeezing/tossing a ball or doing jumping jacks). (V/A/K)
- Have the student check his/her work using the complementary operation. (V)
- Apply the skills to functional situations such as maps, calorie counting, temperatures, sports scores and win-loss records, classified ads and lease and rental agreements. (V/A)

M. 2. COMPUTE USING DECIMAL FRACTIONS and
M. 3. COMPUTE USING FRACTIONS and
M. 4. COMPUTE USING PERCENTS

- Teach concepts using tangible items such as pennies which are one-tenth of a dime, and one-hundredth (1%) of a dollar. (V/K)
- Provide the student with many concrete experiences such as exchanging money, cutting pie-shaped pieces, measuring, weighing, telling time, etc. (V/A/K)
- Apply the skills to functional situations such as banking, finding sales tax, reading pay checks, paying bills, cooking, sports (e.g., track and field), reading stock market reports, and shopping. (V/A/K)

M. 5. USE EXPRESSIONS, EQUATIONS, OR FORMULAS

- Use manipulatives such as geoboards (K)
- Have the student make up mnemonics* for some common formulas. (V/A)
- Apply the skills to functional situations such as home improvement, banking, taking trips, etc. (V/A/K)

M. 6. USE MEASUREMENT

- Develop a measurement reference sheet for the student to use so that s/he can solve the problems "independently". (V)
- Use manipulatives to teach the concepts (e.g., yard/meter stick, containers, measuring cups, clock, geoboard, carpet/tile scraps). (V/K)
- Apply the skills to functional situations such as home improvement, cooking, reading maps, shopping (unit pricing), time zones. (V/A/K)

M. 7. INTERPRET DATA FROM GRAPHS OR COMPUTE AVERAGES

- Create graphs based on class-conducted polls. (V/A/K)
- Use current, meaningful graphs found in newspapers and news magazines. (V)
- Provide each student with the information and materials needed to graph his/her scores from classroom assignments and to average the scores. (V)

STRATEGIES AND METHODS FOR LEARNING HOW TO LEARN

Imagine a commentator covering a tennis tournament and analyzing the performance of the two competitors in this way: The skill level of the players was similar, but it is evident that the winner had a game plan in mind. She appeared to consider her position in the match and react accordingly. She applied different strategies depending upon analysis of each situation. On the other hand, the loser just seemed to hit the ball. Her technical ability was obvious but a strategic plan was not. If she has a complement of strategies to choose from, she did not employ them. Reaction rather than enaction characterized her play today.

The description of the losing tennis player profiles the learning characteristics of many learning disabled students. They need to be taught HOW to learn, and this can be accomplished through learning strategies instruction. Dr. Donald Deshler, from the Institute for Research in Learning Disabilities of Kansas University, has defined learning strategies as techniques, principles, or rules that will facilitate the acquisition, manipulation, integration, storage and retrieval of information across situations and settings.

The following sample learning strategies are preceded by a teaching guideline. Follow it carefully when you introduce and model the strategy. Follow it in modified form when you give the student guided practice with the strategy. Help the student understand WHY, HOW, and WHEN the strategy is used. S/he needs to "overlearn" it to be able to use it automatically.

GUIDELINES FOR TEACHING A LEARNING STRATEGY

1. Be sure that students understand the lesson objective, namely, *Mastering a learning strategy*.

2. Spend four to five minutes introducing the strategy, including stating synonyms, examples, and a working definition, if possible.

3. Use media and content or subject matter with which students are already familiar. Do not introduce a new strategy with new data.

4. Keep the application parts of the lesson short -- six to eight minutes each, at most.

5. Eliminate or at least minimize the interference caused by:
   - other strategies.
   - emotional or value-laden content.
   - subject matter discussion.

6. Focus on the major components of the strategy being introduced, especially on how, when, and why the operation is executed.

7. Devote up to one-third of the lesson time to a reflective reporting, discussing and sharing what the students did in their heads to execute the strategy.

8. In ending the lesson, involve the students in reviewing the key strategy procedures, rules, and criteria. If possible, provide a mnemonic device to assist in memorization.

9. Identify opportunities for using this strategy in out-of-school activities as well as in academic work.

10. Provide extensive practice with the strategy. The student needs to "overlearn" it in order to be able to use it automatically.

Adapted in part from: Masters, L. and Mori, A. *Teaching Students with Mild Learning and Behavior Problems -- Methods, Materials, Strategies*. 1986.

SQ3R

This strategy is often used for teaching expository materials. Teach the student to use this process by employing the steps below.

1. **SURVEY:**
   - A. Glance over the material. Note headings, boldface print, italics, pictures, graphs, charts, etc. to get an idea of the core ideas presented.
   - B. If the selection is lengthy, divide it into sections, using this method on one section at a time.
   - C. Read the first and last paragraphs. The main ideas are presented here.

2. **QUESTION:**
   - A. Use the information in the previous step as well as your own personal interests to formulate question(s) pertaining to the reading selection.
   - B. Having questions in mind as you read, results in increased interest, attention to detail, and a focal point for crystallizing a set of ideas. (that is, greater comprehension!)

3. **READ:**
   - A. Read the answers. Do not passively plow along each line, instead search actively for answers.

4. **RECITE:**
   - A. Having read the material, look away from it and try to recite the answer to your question(s). If you can do this, you know the material; if you can't, glance over the selection again.
   - B. An excellent aid to the recitation process is to jot down clue words/phrases on paper as you read. Make these notes brief! Look at them when it's time to recite.

   NOTE: If the material is broken into sections, repeat steps 2, 3, and 4 for each section until the entire selection has been digested.

5. **REVIEW:**
   - A. When the entire selection has been read, look back over it (and your notes if applicable) to get a "bird's eye view" of the material. Remember your question and answers!

Adapted in part from: Frederick County BOE's *Special Education Teaching Strategies and Resources -- Reading*.

INDEPENDENT COMPREHENSION STRATEGY*

Title_____

Topic (my words)_____

I. Getting Ready to Read

A. What do I already know about this topic?

What I Know	+, - (include author's ideas)
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

B. What do I want to know about this topic?

My questions	Other Questions
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

II. Following Your Reading

A. What new ideas did I discover?

1._____

2._____

3._____

B. What new vocabulary did I discover?

_____

C. Memory Bank summary of selection read:_____

_____

*Modified from strategy developed by Gloria Neubert, Towson State University, Towson, MD

READY READING REFERENCE

BEFORE YOU READ-

Look
at title, pictures, headings
to see what the topic will be.

Tell
yourself what you already
know about the topic.

Decide
what you want to find out.

Predict
what the author will say.

WHILE YOU READ-

Tell
yourself what the author
says.

Ask
yourself if what you are
reading makes sense.

Identify
the main ideas.

Predict
what will come next.

IF YOU DON'T UNDERSTAND-

Identify
the problem.

Remind
yourself of what you want
to find.

Look Back.

Look Ahead.

Slow Down.

Ask
for help.

AFTER YOU READ-

Retell
what you read in your own
words.

Summarize
the most important ideas.

Ask
yourself questions and
answer them.

Picture
in your mind what the author
described.

Decide
what was especially interesting
or enjoyable.

Source: Maryland State Department of Education
Division of Instruction
Language and Learning Improvement Branch

GRAPHIC ORGANIZERS

Graphic organizers are visual representations of concepts which help students learn, remember, and organize important information they've read, listened to, or thought (as in planning a written composition). They also guide students to internalize important thinking skills such as classification, analysis, and synthesis.

Name_____

AWESOME ADDITION

STUDENT PAGE

1. In the blocks below, put some of the most important details in the article.

2. Think of all the details together. They should add up to the main idea. Write it in below the line.

DETAILS

MAIN IDEA

Source: *Learning 92* v21 n2 (September) p 76.

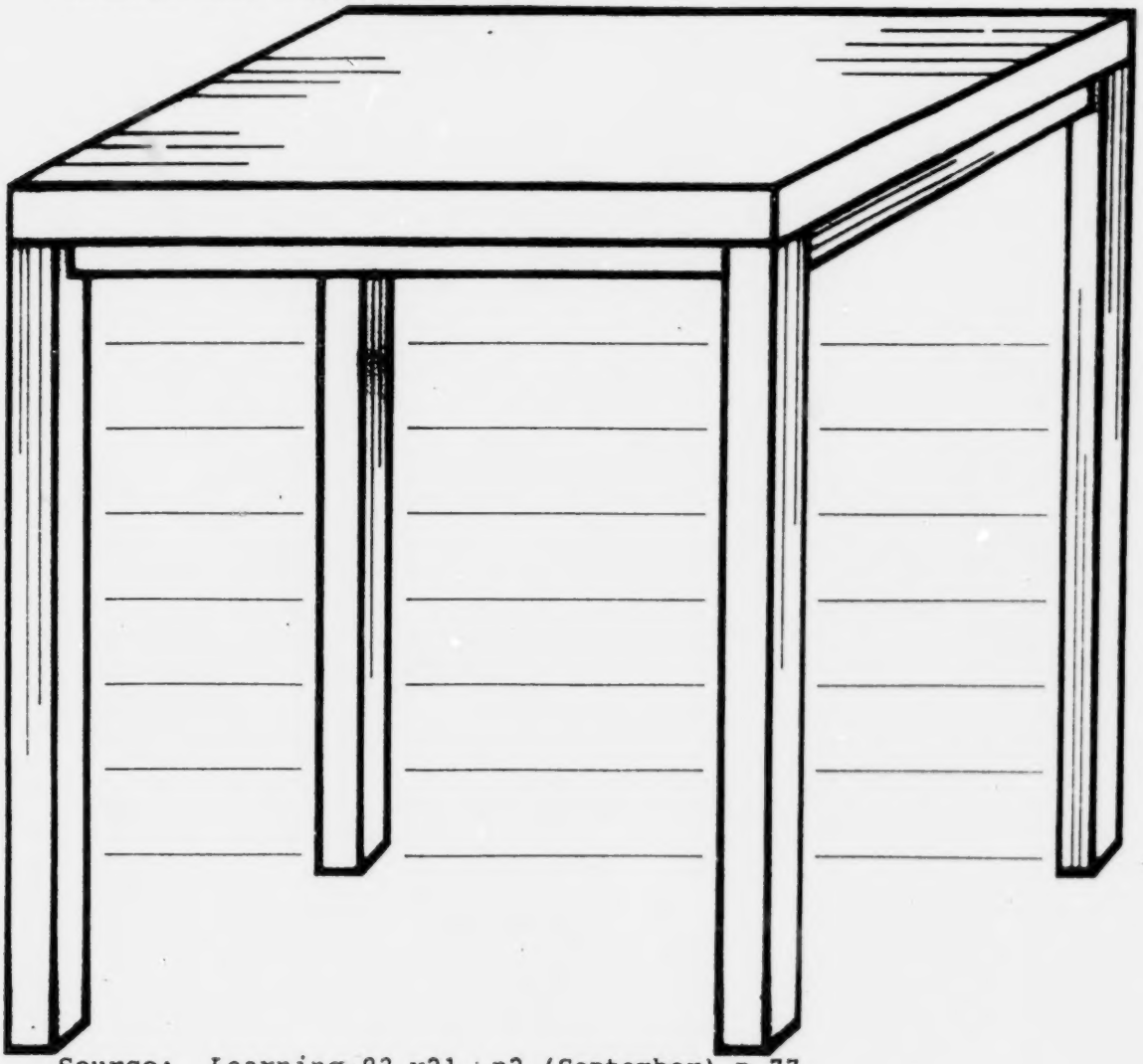
Name_____

LOGICAL LEGS

STUDENT NAME

1. On the tabletop, write the main idea as a complete sentence.

2. On the lines next to the legs of the table, write some of the details that support this main idea.



Source: *Learning 92* v21, n2 (September) p 77.

Name_____

UMBRELLAS OF UNDERSTANDING

STUDENT PAGE

1. Inside the umbrella, write the main idea in a complete sentence.

2. On the lines next to the handle, write some of the ideas or details that the main idea covers.

Source: *Learning 92* v21, n2 (September) p 82.

MAIN IDEA CHART

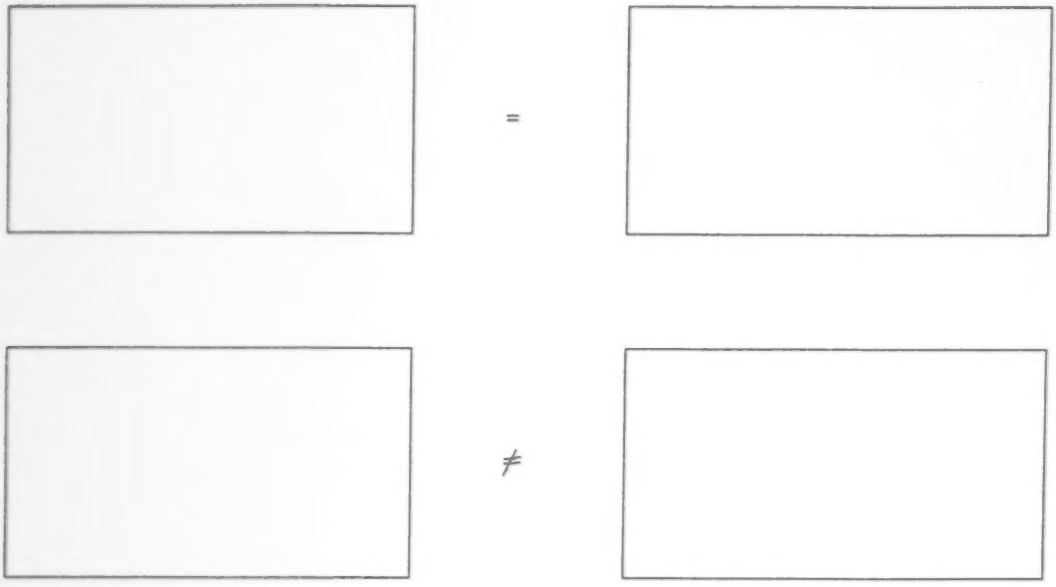
PAGE	PARAGRAPH	MAIN IDEA	VOCABULARY	DETAILS

Source: Frederick County Public Schools
Instructional Approaches and Strategies Handbook
Language Arts Curriculum

FACTS	TOPIC	OPINIONS

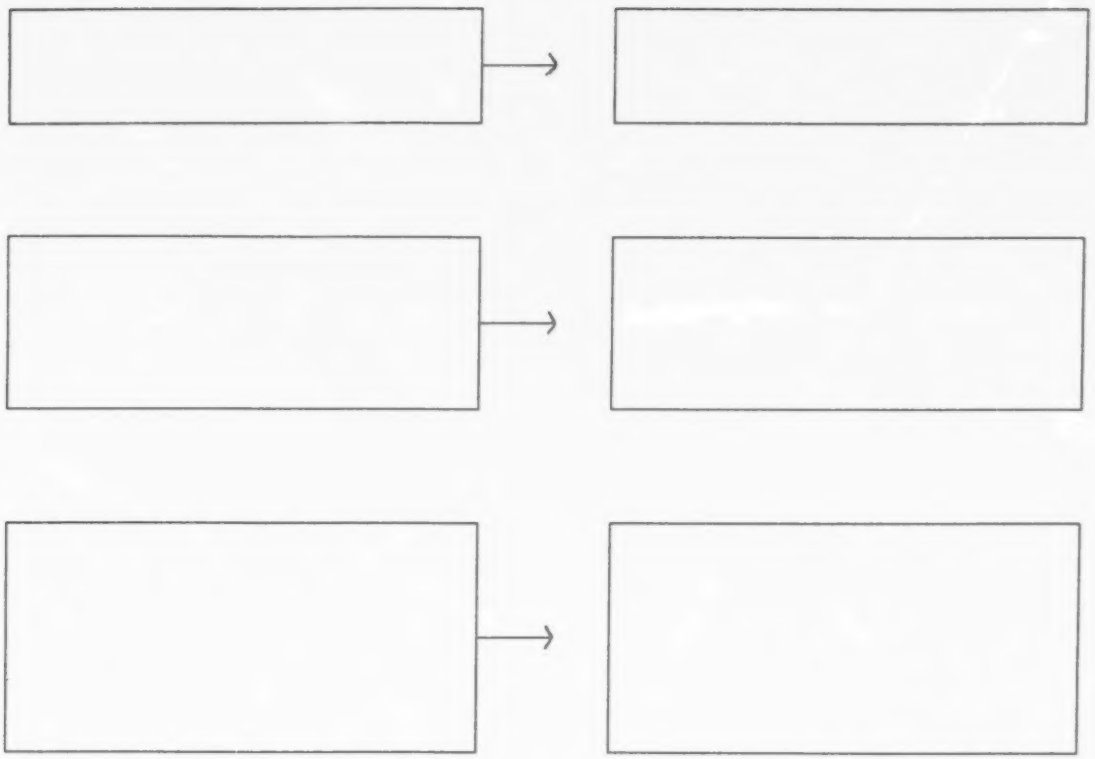
Source: Frederick County Public Schools
Instructional Approaches and Strategies Handbook
Language Arts Curriculum

COMPARE AND CONTRAST



Source Unknown

CAUSE EFFECT

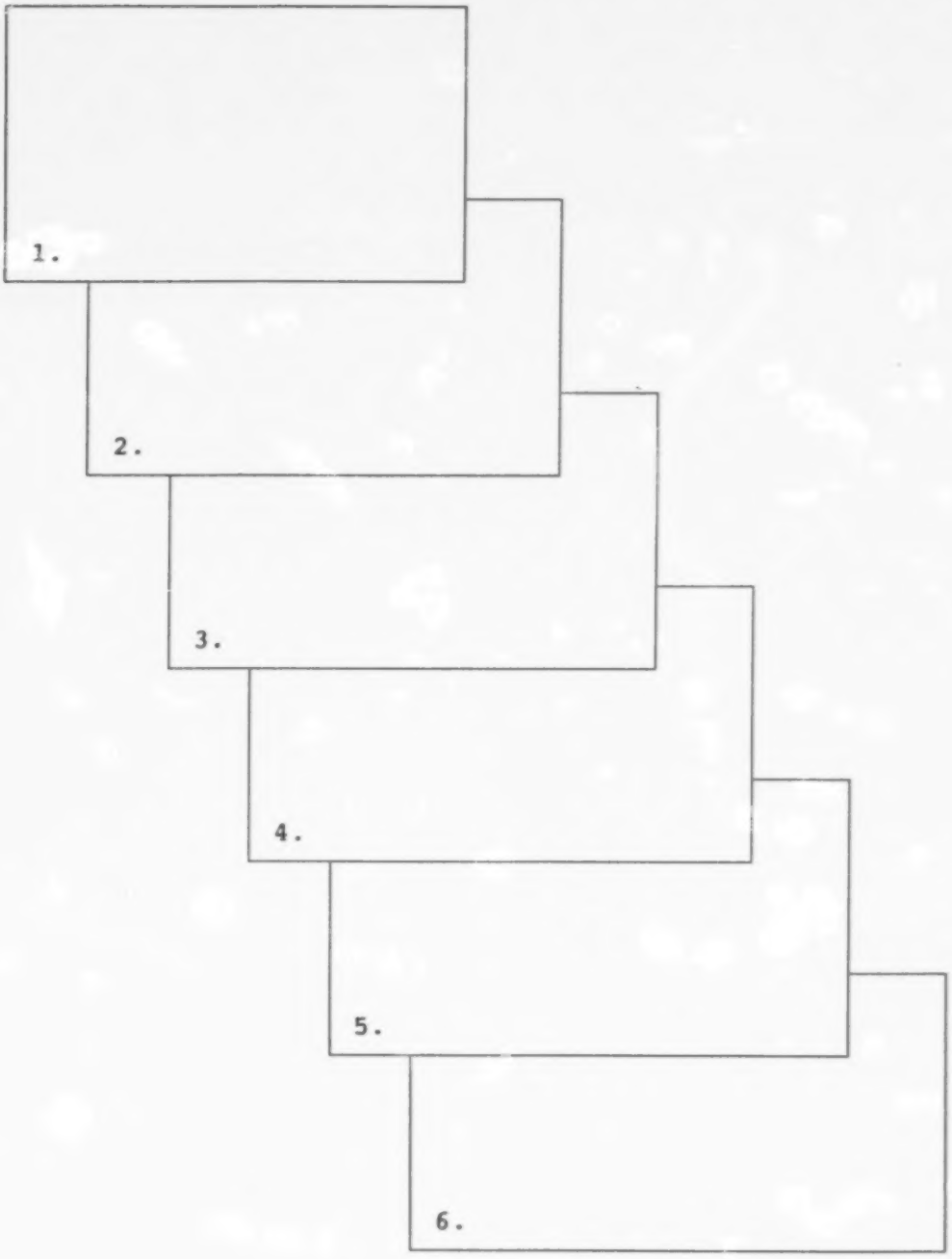


Source: Frederick County Public Schools
Instructional Approaches and Strategies Handbook
Language Arts Curriculum

ADD UP THE FACTS

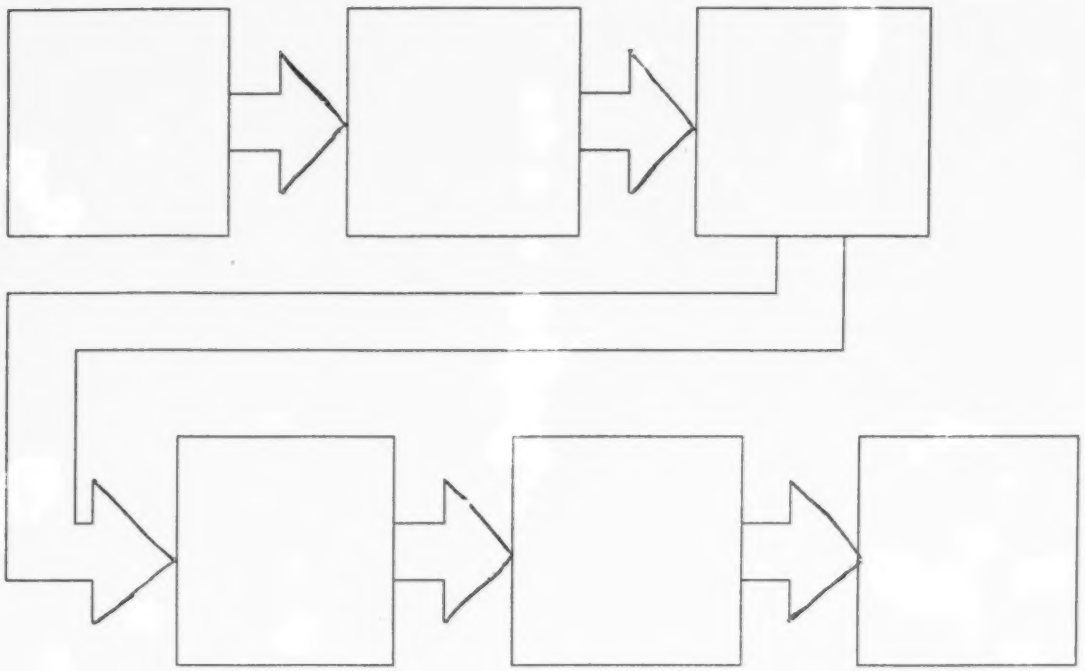
Source: Frederick County Public Schools
Instructional Approaches and Strategies Handbook
Language Arts Curriculum

STEP BY STEP CENTER



Original source of form unknown

Sequence Chain for



Original source of form unknown

LISTENING STRATEGY

This strategy is used when the student needs to comprehend and possibly write about information from a listening experience. Teach the student to use this process by employing the steps described below:

1. Draw a large triangle or other shape on note paper.

2. Number the angles sequentially. These are the "main point" angles.

3. As you listen and/or after you listen, you are to record the major points (ideas) that you heard.

4. If you feel that many ideas are important, you may write them on the sides of the shape. One goal to work toward is skill in differentiating what is MOST important (angles) vs. less important (sides).

5. In the center of the shape, you will record other thoughts and questions that came to mind as you were listening.

SOURCE: Matanzo, J. in Frederick County BOE's INSTRUCTIONAL APPROACHES AND STRATEGIES HANDBOOK-LANGUAGE ARTS CURRICULUM

JOT OUTLINE

Use this strategy to help a student get started on a writing task.

1. Choose a topic.

2. Brainstorm, randomly writing pertinent words or phrases on a paper.

3. Pick out the main ideas. Write each one on a separate paper or index card.

4. Tie supporting details to the main points by writing them on the corresponding paper OR by writing each on a separate slip of paper and placing it near the main idea.

5. Now number or physically arrange the main ideas and details in logical order.

Source: *Bringing Literacy Within Reach. Identifying and Teaching Adults with Learning Disabilities.* LDAC, 1991.

FOUR STEP SURE-STEP STRATEGY

This strategy will enable students to learn and reinforce vocabulary.

1. Select a word from a reading selection, real-life material, and/or student's own interest area.

2. Use the Four Step Sure-Step form and follow the steps with the student:

   a) SEE IT (you can draw the configuration of the word as an aid)

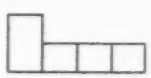
   b) SAY IT (have student pay close attention to how the mouth makes the sounds)

   c) WRITE IT (you may begin with tracing; large is best) Overlap the "say it" step so that the student repeats the word as s/he writes it.

   d) RELATE IT (what does this word remind you of...where do you see this word...when do you say this word...draw a picture...)

3. Reinforce the student for reviewing the chart and for using/reading the new vocabulary words.

A FOUR STEP SURE-STEP WAY TO LEARN A WORD

SEE IT	SAY IT	WRITE IT	RELATE IT
fume 	(apply decoding rules)	(for tracing: write word on transparency and project onto large paper)	

Source: Frederick County Public Schools
Instructional Approaches and Strategies Handbook
Language Arts Curriculum

A FOUR STEP SURE-STEP WAY TO LEARN A WORD

SEE IT	SAY IT	WRITE IT	RELATE IT

RETRIEVAL STRATEGY

When there's a word on the tip of your tongue...

RELAX. The needed word may pop into your head.

FOCUS. Pay attention to the associations that occur when you search for the word. One of these may trigger the word.

RECITE. Go through the alphabet. Sometimes the initial letter "pops out" and the whole word is retrieved.

Source: *Bringing Literacy Within Reach. Identifying and Teaching Adults with Learning Disabilities.* LDAC, 1991.

WORD PROBLEM SOLVING STRATEGY

This strategy is used when the student has the requisite computational skills but has difficulty solving word problems. Encourage the student to "think aloud" and to use visualization and manipulatives to determine the answers to the questions.

WORD PROBLEM SOLVING STRATEGY

THINK SHEET

Your work:

Question 1. What do I want to determine?

Question 2. What facts do I already know?

Question 3. What else do I need to know?

Question 4. What mathematical operation or operations should I use? How do I set this up?

Question 5. What unnecessary information is given?

Compute the answer.

Question 6. Is my answer partial or complete?

- -

Your work:

Question 1. What do I want to determine?

Question 2. What facts do I already know?

Question 3. What else do I need to know?

Question 4. What mathematical operation or operations should I use? How do I set this up?

Question 5. What unnecessary information is given?

Compute the answer.

Question 6. Is my answer partial or complete?

STRATEGIES AND METHODS

Teacher Reference

VAKT

Source: Monroe County Community Schools Corporation, *C.U.B.E. Learning Disabilities. Goal VI. A Reading Program for Adult Basic Education, 0-6 Grade Students.*

The **VAKT** is a multi-sensory learning process which uses all of the senses through a Visual-Auditory-Kinesthetic-Tactile approach. The student is seeing (visual), hearing (auditory), feeling (tactile) the word at the same time while incorporating those senses with motor (kinesthetic) movements.

In essence, the method is very simple to use. The teacher writes a word on the blackboard for the student to trace. While the student is tracing, she names each letter or the sounds of the letters.

This method is particularly suited for A.B.E. teaching for three reasons:

1. The student has the opportunity to learn the word by using several modalities at the same time.

2. It requires little training on the part of volunteers, para-professionals and teachers.

3. It also requires no new materials and can be used to meet the student's immediate vocabulary needs.

There are three ways to use VAKT with your A.B.E. students. Depending on the student's needs, you may decide to use VAKT for any or all of the following:

1. phonetic analysis
2. retention of sight words
3. spelling

For Use in Developing Phonetic Analysis Skills:

1. On an unlined chalkboard, the teacher writes a word in cursive form. This should be done in large writing (six inches), at the eye level of the student.

2. The teacher then uses the chalk to trace the word. As she is tracing, she also says the sound of each letter. The word is pronounced at the beginning and end of the tracing process. Each sound must be said while it is being traced.

3. The student is then asked to repeat the procedure:

   -say the word
   -start tracing the word, saying each sound while it is being traced
   -say the word after tracing all of the letters

   The student may initially have difficulty remembering the sounds. The teacher may choose to say the sounds while the student is tracing.

For Retention of "Sight" Vocabulary:

1. On a chalkboard, the teacher writes the word in large letters (six inches), at the eye level of the student.

2. The teacher says the word and then starts to trace each letter. The name of each letter is said as it is traced. The word is pronounced again after the tracing process is completed.

3. The student is asked to repeat the same process:

   -say the word
   -say the name of each letter while it is being traced
   -say the word

For each of the three uses of VAKT it is the middle step which changes and thus determines the purpose for using this method. In phonetic analysis the sound of each letter is important. When learning sight words, the word as a unit is stressed. And finally, for spelling purposes the name of each letter is vocalized.

With each of the three uses, the student will trace the word several (approximately ten) times before s/he is asked to write the word from memory. Whenever the student cannot recall accurately, s/he simply repeats the same process.

This process is continued until the word has been established as part of the student's vocabulary. The learning process may be stretched out over several meetings. Learning has been established when the word can be recalled accurately for several consecutive days.

Variations:

1. A word may be written in magic marker on paper. The teacher and student use their fingers for tracing.

2. A word file may be kept as a record of those words the student would like to learn and those words the student has mastered.

3. Colored chalk or pencils may be used to distinguish the writing of the student from the teacher's.

4. The word may be traced in sand or on sandpaper. This greatly increases the tactile sense.

5. The student may write the word in the air after tracing it on the blackboard.

6. After working on the blackboard, the student turns around and closes her eyes to get a visual-memory picture of the word. S/he then says the word and then recalls tracing of it.

7. The student may trace the word repeatedly as quickly as possible. The speed helps to reinforce the learning process.

8. Weights may be tied to the student's wrist in order to accentuate the gross motor movements.

Caution:

1. Be sure there is a relaxed atmosphere. The student and teacher should be concentrating on the VAKT process.

2. Be sure to demonstrate the process before the student starts. This will help insure a positive start for this new experience.

3. Position the student so that his/her body is in the middle of the word. This insures that the left to right movement will be accentuated.

4. Watch carefully as the student traces the letters. Each letter should be formed in a appropriate manner. For example, the letter *u* should not look like an *o* and vice-versa.

5. Do not isolate any part of the word by using just a part of it. The purpose of VAKT is to maintain the word as a whole. For example, do not pronounce just the *d* in dog.

6. Use of a chalkboard is preferred because it requires gross motor movements.

7. Unlined chalkboards should be used so that the student can focus on the VAKT process rather then getting each letter on the line.

Teacher Reference

HIERARCHY OF THINKING SKILLS

BASED ON BLOOM'S TAXONOMY

EVALUATION: Students present opinions, judge the validity of ideas or quality of work.

Question Starters

Why do you think _____?
Do you agree _____?
What is your opinion of _____?
Prove/disprove that _____ is better than _____.
Prioritize _____.
Assess the value or importance of _____.
Would it be better if _____?

SYNTHESIS: Students combine ideas in unique ways such as solving problems, making predictions, or producing original communications.

Question Starters

How can we solve _____?
If you had _____, how would you _____?
How can we improve _____?
What will happen if _____?
Suppose you could _____?
Combine _____.
What is another way _____.
Design a new use for _____?
Create _____.
Adapt _____ for _____.
Invent _____.
Design a new _____.

ANALYSIS: Students analyze constituent elements by identifying motives or causes, making inferences, and finding evidence to support generalizations.

Question Starters

What are the parts or features of _____?
Classify/categorize _____.
How is _____ related to _____?
Outline _____.
Why do you think _____?
Diagram _____.
Identify _____.
List _____.
Delineate _____.
Infer _____.
What evidence can you find to _____?
What does _____ tell us about _____?

APPLICATION: Students solve problems using acquired knowledge or application of facts, techniques or rules.

Question Starters

How can you use _____?
Find an example of _____?
Solve _____ using what you have learned.
Organize _____ to show _____.
Show your understanding of _____ by _____.

COMPREHENSION: Students organize and select facts and ideas in the material by giving descriptions, stating main idea, or comparing.

Question Starters

Describe _____?
What is the main idea of _____?
Interpret or put in your own words _____.
Compare _____.
How are _____.
Discuss _____ alike/different?
Clarify _____.
What can you say about _____?
Which is the best answer?
Which comes first, _____ or _____?
Arrange the _____ in order.
Why did _____?

MEMORY: Students obtain answers to questions directly from the information presented.

Question Starters

What is _____?
How is _____?
Where is _____?
When did _____ happen?
How did _____ happen?
Who _____?
Define _____.
Explain _____.

ANNOTATED BIBLIOGRAPHY

DOCUMENTS

Most of these documents are available through ERIC. See the "Organizations and Agencies" section.

Adult Literacy and Basic Skills Unit. Specific Learning Difficulties. London, U.K.: Adult Literacy and Basic Skills Unit, 1989. ED 303667

Findings from a project aimed at identifying and piloting forms of learning support for dyslexic adult basic education students suggest use of error analysis of reading and writing samples for diagnosis and learning strategies in learning support classes as effective interventions.

Anderson, Patricia L., and Loring C. Brinckerhoff. Interpreting LD Diagnostic Reports for Appropriate Service Delivery. Paper presented at the Annual Conference of the Association on Handicapped Student Service Programs in Postsecondary Education, Seattle, WA, 12 August 1989. ED322671

Use this resource to analyze formal and informal evaluations. Use that information to meet LD adults' needs through support services, instructional accommodations and program modifications.

Armstrong, Audrey A., and Sally P. Hunt. VITAL Guidelines. Tutor Training for an Adult Literacy Program. Bloomington; IN: Monroe County Public Library; 1982. ED244104

An explanation of LDs as they affect reading is included with an array of instructional resources.

Beltran, Alejandro C., and others. Resources for Exceptional Adult Education: An Annotated Bibliography. Boca Raton, FL: Florida Atlantic Univ., Adult Education Division., 1987. ED324467

Learning disabilities is one of seven categories of disabilities addressed here. Citations include resource, assessment, training, curriculum, and research information.

Bingman, Mary Beth. Learning Differently: Meeting the Needs of Adults with Learning Disabilities. Knoxville, TN: Center for Literacy Studies, Tennessee Univ., 1989. ED312479

This "handbook" provides information and resources for identifying and teaching adult LD students to read. Error analysis, metacognition, and learning styles are emphasized.

Colvin, Ruth J., and Jane H. Root. TUTOR. Techniques Used in the Teaching of Reading. A Handbook for Teaching Basic Reading to Adults and Teenagers. 6th Ed. Syracuse, NY: Literacy Volunteers of America, Inc., 1987. ED292949

Although not focused on learning disabilities, the information, resources, strategies, and sample forms pertaining to assessment, goal setting and lesson planning can be easily adapted.

Cotsworth, Vickie, and Katha O'Hara. Project LIFTS--A Summary. An Occasional Report. Topeka, KS: Kansas State Department of Education, 1984. ED259083

Learning Improvement through Teaching Strategies (LIFTS) provides a model for instruction of any teaching strategy; however, grammar and writing skills for learning disabled community college students are emphasized.

Dangel, Harry. Remediating Dyspedagogia: Adapting Materials and Strategies to Learners' Needs. Paper presented at the International Conference of the Association for Children and Adults with Learning Disabilities. New Orleans, LA, 28 February - 2 March 1984. ED259536

The LOAD (Learning, Operation, Application, and Data Management) procedure for effective teaching of learning disabled students is explained and illustrated with examples.

Hagner, Tom., and others. Learning Problems of Adult Basic Education Students: Remediation and Compensations. Dover Adult Learning Center, NH., 1989. ED320014

Six ABE teachers investigated learning disabilities and addressed six major problem areas: reading and language, writing, mathematics, study skills, memory, and behavior. Suggestions for overcoming the problem (remediation) and for working around the problem (compensation) are presented.

Hanson, Mary Menair. A Bibliography of Materials for and about Adult New Readers. Bibliography of the Library Literacy Project, The Maine State Library. Augusta, ME: Maine State Library, 1987. ED302257

This bibliography will assist the teacher/tutor or librarian in choosing and using appropriate materials from a variety of categories (fiction, non-fiction, textbooks, etc.) with the student who is reading up to the 5th grade level.

Hellwege, Nancy C., and Irene L. Sell. Different Strokes for Different Folks. Miami, FL: Miami-Dade Community College, 1990. ED 329655

This manual suggests a basic education program using video taped newscasts and complementary newspaper reports which match assignments to the needs of "simultaneous processors" - those who learn best through the integration of seeing, hearing, speaking, doing, and experiencing.

Hoy, Cheri A., and K. Noel Gregg. Description and Definition of Learning Disabilities. Academic Assessment and Remediation of Adults with Learning Disabilities: A Resource Series for Adult Basic Education Teachers. Athens, GA: Clarke County Board of Education, 1984. ED285351

Case studies, research findings and a glossary help to define and describe learning disabilities in adults.

Hoy, Cheri A., and K. Noel Gregg. Appraisal and Assessment of Learning Disabilities, Including a Special Bibliography. Academic Assessment and Remediation of Adults with Learning Disabilities: A Resource Series for Adult Basic Education Teachers. Athens, GA: Clarke County Board of Education, 1984. ED285352

Guidelines for observation, interviewing, and error analysis as part of a continuous evaluation procedure are proposed. Lists of specific assessment tools are included.

Hoy, Cheri A., and K. Noel Gregg. Assessment and Remediation of Reading. Academic Assessment and Remediation of Adults with Learning Disabilities: A Resource Series for Adult Basic Education Teachers. Athens, GA: Clarke County Board of Education, 1984. ED285355

Reading recognition and reading comprehension skills including auditory and visual processing, word categories, context clues, memory, and vocabulary are addressed. The recommended remediation strategies are correlated with the assessment.

Hoy, Cheri A., and K. Noel Gregg. Assessment and Remediation of Mathematics. Academic Assessment and Remediation of Adults with Learning Disabilities: A Resource Series for Adult Basic Education Teachers. Athens, GA: Clarke County Board of Education, 1984. ED 285356

The assessment and remediation sections each address the three fundamentals of mathematic achievement: calculation, concepts, and applied problems. Auditory, visual, and kinesthetic processing deficits are considered.

Hoy, Cheri A., and K. Noel Gregg. Assessment and Remediation of Oral Language. Academic Assessment and Remediation of Adults with Learning Disabilities: A Resource Series for Adult Basic Education Teachers. Athens, GA: Clarke County Board of Education, 1984. ED 285353

Informal assessments of the major oral language components (auditory discrimination, grammar, vocabulary, social use of language and oral language recall) are provided, then suggestions are offered for remediation of those skills.

Hoy, Cheri A., and K. Noel Gregg. Assessment and Remediation of Written Language. academic Assessment and Remediation of Adults with Learning Disabilities: A Resource Series for Adult Basic Education Teachers. Athens, GA: Clarke County Board of Education, 1984 ED 285354

The information presented in this booklet can be used to assess and remediate weaknesses in these areas: punctuation, capitalization, syntax, organization, and ideation.

Love, Linda J., Learning Together: A Handbook for Teaching Adults with Learning Disabilities. Nanaimo, British Columbia: Malaspina College, 1985. ED263328

This handbook focuses on learning disabled adults and their teachers in postsecondary education, but much of the information can be applied to literacy situations.

Lowery, Cheryl M., Teaching Adults with Learning Disabilities. ERIC Digest No. 99. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education, 1990.

Information about the definition and assessment of learning disabilities is followed by suggested teaching techniques (including learning style/multisensory instructions and learning strategies).

Main, Jo Deil K. Computer Assisted Teaching Comparisons with Handicapped. Final Report. Versailles, IN: Southeastern Indiana Vocational School, 1984. ED256865

This study demonstrated that a combination of traditional teacher instruction and computer-assisted instruction resulted in improvements in word recognition and mathematics achievement for low-level adult students, including some with severe learning disabilities.

McAlister, Ellen D., and A. C. Bickley. Handbook for the Teaching of Beginning Adult Learners and/or Adults with Learning Problems. A Product Formulated for Staff Development of Adult Educators, Volunteer Tutors and Instructional Aides. Darlington, S.C.: Darlington County School District. 1983. ED244112

Practical applications of adult learning theory, information on types of assessment (including modality assessment), and resources to supplement Laubach and general ABE instruction are included in this handbook.

Manhattan Adult Learning and Resource Center, Working with Adults Who Have Learning Disabilities. Project Upgrade. KS: 1988 ED310237

This book covers information from an overview of learning disabilities through psychosocial adjustment, diagnosis, instructional techniques (with an emphasis on reading) and recommendations for the future of educating the learning disabled.

Manzone, Christine A. Six Strategies for Teaching Reading Comprehension to Learning Disabled Students. 1989 ED311667

This paper details six reading comprehension strategies which can be implemented with a cooperative learning partner or one-on-one with a teacher or tutor. Their use should result in improved comprehension in narrative and content area reading.

Mays, Francine, and Susan Imel. Adult Learning Disabilities. Overview: ERIC Fact Sheet No. 9. Columbus, OH: ERIC clearinghouse on Adult, Career, and Vocational Education, 1982. ED237797

A somewhat dated but still adaptable presentation of information on how to detect, diagnose and instruct learning disabled adults.

Moleck, Carol. Special Delivery Systems. Self-Esteem Exercises. Learning Disablities Curriculum. Lewistown, PA: TIU Adult Education and Job Training Center, 1990. ED333142

This 233 page handbook is a resource for designing an individualized adult basic education program in mathematics, reading, language arts, writing, study skills, and/or self-esteem. Assessment, materials and teaching strategies are included.

Monroe County Community Schools Corporation, C.U.B.E. Learning Disabilities. Goal VI. A Reading Program for Adult Basic Education, 0-6 Grade Students. Bloomington, IN: Vincennes University, 1981. ED211829

Although not recently written, this program includes thorough descriptions of still-used multimodality teaching techniques such as the Neurological Impress Method, the Prime-O-Tec Reading Program, and the Visual-Auditory-Kinesthetic-Tactile (VAKT) Approach.

Montgomery, Dorothy. STALD: Screening Test for Adults with Learning Difficulties and Strategies for Teaching Adults with Learning Difficulties. Wichita Falls, TX: Education Service Center Region 9, 1986. ED 287988

A complete informal evaluation with instructions for the volunteer or teacher. A guide to interpretation and implications for remediation are included.

Nightingale,Demetra, and others. The Learning Disabled in Employment and Training Programs: Research and Evaluation Report Series 91-E. Washington, D.C.: Urban Institute, 1991.

The ABE teacher will find this useful for its guidelines on comprehensive evaluation and its resources for providing basic skills instruction to learning disabled students.

Ross-Gordon, Jovita M. Adults with Learning Disabilities: An Overview for the Adult "Educator". Information Series No. 337. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education, 1989.

This noted author advocates a cautious approach to assessment of learning disabilities and identifies major issues in the field that are in need of systematic research. She emphasizes a positive approach to teaching adults with learning disabilities.

Smith, Margaret, and Zoe Dalheim. Project READ. A Study of Twenty Reading Disabled Adults. ED 328726

One of the few research studies on this population, it revealed that the direct teaching of phonics and language structure in a controlled, sequential format is more effective for learning disabled readers than when the inclusion of phonics instruction and the method of its instruction are at the teacher's discretion.

JOURNALS

Gajar, Anna. "Adults with Learning Disabilities: Current and Future Research Priorities." Journal of Learning Disabilities v25 n8 (October 1992): 507-519.

This author offers recommendations to remedy the dearth of research (especially in the area of instructional practices) pertaining to learning disabled adults.

Gerber, Paul. "Successful LD Adults." Puzzle People News VX11 n6 (Oct. - Nov. 1989)

A description of nine "magic ingredients" which characterize 50 highly successful learning disabled adults from this study.

Hammill, Donald D. "On Defining Learning Disabilities: An Emerging Consensus." Journal of Learning Disabilities" v23 n2 (February 1990) pp 74-84.

A thorough analysis and comparison of the prominent definitions of learning disabilities.

Kann, Robert. "The Method of Repeated Readings: Expanding the Neurological Impress Method for Use with Disabled Readers." Journal of Learning Disabilities v16 n2 (February 1983): pp 90-92.

This rationale for adaption provides hope for the reader who decodes word-by-word and fails to comprehend.

Knight, Joan. "The Adult Dyslexic in Remediation: The ABC's and Much More." Churchill Forum V111 (3) (June 1986): pp 1-6.

The psychosocial effects of LDs is highlighted here.

Lincoln, Lisa. "Fractions through Fruit Salad." Academic Therapy v22 n3 (January 1987): pp 303-07.

A group of young adults (15-20 years old) participated enthusiastically in a multisensory learning experience which resulted in knowledge gains.

Meyer, Valerie. "Prime-O-Tec: A successful Strategy for Adult Disabled Readers." Journal of Reading v25 n6 (March 1982): pp 512-15.

A research study concluded that this technique (which includes listening, saying, seeing, and touching) is effective with disabled adult readers.

Payne, Nancie. "Facilitating Learning for Adults with Learning Disabilities." Adult Learning v3 n6 (April 1992) p 16.

This article instructs the teacher on how to mediate between the learning environment (including the type of task) and the learning disabled student.

Ross, Jovita-Martin, and Judith Osgood-Smith. "Adult Basic Educators' Perceptions of Learning Disabilities." Journal of Reading v33 n5 (February 1990): pp 340-47.

ABE and GED teachers generally hold positive attitudes toward the learning disabled, according to this study. Suggestions for teacher development and a service model for teaching learning disabled adults are included.

Ryan, Ann Grasso and Lynda Price. "Adults with LD in the 1990s." Intervention in School and Clinic v28 n1 (September 1992): pp 6-20.

Solutions are proposed in educational, vocational, and social service areas for the myriad of challenges facing learning disabled adults.

Vaugh, William J. "Project ABLE: Help for Adults with Learning Disabilities." Phi-Delta Kappan v66 n6 (February 1985) pp 444-45.

This successful program which provides functional educational services to adults features individualized, structured, remedial lessons in language arts and mathematics combined with large-group motivational sessions.

Vogel, Susan A. "An Overview of the Special Topical Issue on Adults with Learning Disabilities." Learning Disabilities Focus v5 n2 (Spring 1990) p 67.

This entire issue is devoted to learning disabled adults.

BOOKS

Alley, Gordon and Donald Deshler. Teaching the Learning Disabled Adolescent: Strategies and Methods. Denver, CO: Love Publishing Co., 1979.

This work introduces "learning strategies" and other approaches which can be adapted for adults.

Draves, William A. How to Teach Adults. Manhattan, KS: The Learning Resources Network, 1984.

This is a general reference and included here because we are working with individuals who are ADULTS first, learning disabled second.

Harwell, Joan M. Complete Learning Disabilities Handbook Ready-to-Use Techniques for Teaching Learning Handicapped Students. West Nyack, NY: The Center for Applied Research in Education, Inc., 1989.

This resource can be adapted for the remediation of beginning level adults.

Johnson, Doris J. and Jane W. Blalock. Adults with Learning Disabilities: Clinical Studies. Orlando, FL: Grune + Stratton, 1987.

This an in-depth work which analyzes many sub-types of learning disabilities.

Learning Disabilities Association of Canada. Bringing Literacy Within Reach. Identifying and Teaching Adults with Learning Disabilities. Ottawa, ON: LDAC, 1991.

An extensive informal screening and corresponding teaching strategies in reading, writing, spelling, and math are provided for the literacy tutor and student.

McCarney, Stephen B. and Kathy K. Cummins. The Pre-Referral Intervention Manual: The Most Common Learning and Behavior Problems Encountered in the Educational Environment. Columbia, MO: Hawthorne Educational Services, 1988.

Each "learning problem" includes a list of teacher interventions and suggested remediations.

Masters, Lowell F., and Allen A. Mori. Teaching Secondary Students with Mild Learning and Behavior Problems: Methods, Materials, Strategies. Rockville, MD: Aspen Systems Corp., 1986.

Much of this comprehensive work can be adapted for learning disabled adults.

Ross-Gordan, Jovita M. Adults with Learning Disabilities: An Overview for the Adult Educator. Columbus, OH: Center on Education and Training for Employment, The Ohio State University, 1989.

An essential reference for those interested in detecting and effectively teaching the LD adult.

GLOSSARY

AUDITORY - Pertaining to the sense of hearing.

BLOOM'S TAXONOMY - A classification of educational objectives developed by Benjamin S. Bloom. See page 84 for a hierarchy of thinking skills and associated question starters.

FOUR STEP SURE-STEP STRATEGY - A VAKT technique for vocabulary development. See page 76.

GRAPHIC ORGANIZER - See page 63.

JOT OUTLINE - See page 75.

KINESTHETIC - Refers to the senses that provide an individual with knowledge of movements and locations of the body.

MNEMONICS - A technique for improving one's memory by using artificial aids; e.g., letter and word gimmicks. For example, a student may be able to memorize all fifty states by using the initial letter of each state's name to form a code system in which sentences are developed that are meaningful for the student and simultaneously trigger the name of a given state (e.g., "all apples..."/"Alabama, Alaska...").

MODALITY - A pathway of learning; an avenue of acquiring sensation.

THINKING SKILL/STRATEGY - see page 57.

TIC-TAC-TOE METHOD - This method for multiplying and dividing without facts memorization was developed by Dr. Richard Cooper of Learning disAbilities Resources (see Organizations and Agencies section) and can be ordered through that facility.

VAKT TECHNIQUE - A multisensory approach developed by Grace Fernald for teaching reading. The approach involves visual (V), auditory (A), kinesthetic (K) and tactual (T) teacher - learner activities. See page 81.

VISUAL - Pertaining to the sense of sight.

ORGANIZATIONS AND AGENCIES

You may wish to make the following contacts to increase your understanding of and ability to teach learning disabled adults. You will find that the majority of these organizations have information packets available at no charge!

Attention Deficit Disorder Association
2620 Ivy Place
Toledo, Ohio 436113
(508)462-0495

Center for Special Education Technology
Council for Exceptional Children
1920 Association Drive
Reston, VA 22091
1-800-873-8255

ERIC/NCLE (National Clearinghouse on Literacy Education)
Center for Applied Linguistics
1118 22nd Street, NW
Washington, DC 20037
(202)429-9292/9551)
To order ERIC documents, call 1-800-443-3742 (have the "ED" six digit number ready)

ERIC Clearinghouse on Adult, Career, and Vocational Education
1900 Kenny Road
Columbus, OH 43210-1090
1-800-848-4815

GED Testing Service (Special Testing for Learning Disabled Students)
One Dupont Circle, NW
Suite 20
Washington, DC 20036
(202)939-9490

Group for the Independent Learning Disabled (GILD)
c/o Georgia Casey
PO Box 322
Brooklandville, MD 21022
(410)426-0327

HEATH Resource Center
One Dupont Circle
Suite 670
Washington, DC 20036-1193
1-800-54-HEATH

Independence Center for Young Adults with Learning Disabilities
11600 Nebel Street, Suite 200
Rockville, MD 20852
301-468-8810

Interagency Committee on Employment of People with Disabilities
Equal Employment Opportunity Commission
1801 "L" Street, NW
Washington, DC 20507
(202)663-4568

International Reading Association
800 Barksdale Road
P.O. Box 8139
Newark, DE 19714-8139
(302)731-1600

Learning Disabilities Association of America
4156 Library Road
Pittsburgh, PA 15234
(412)341-1515

Learning (dis)Abilities Resources
P.O. Box 716
Bryn Mawr, PA 19010
215-525-8336
1-800-869-8336

Maryland Associates for Dyslexic Adults and Youth, Inc.
The Rotunda, Suite 310
711 W. 40th Street
Baltimore, MD 21211
410-889-5487

National Center for Learning Disabilities
(formerly the Foundation for Children with Learning Disabilities)
99 Park Avenue
New York, NY 10016
(212)687-7211

National Library Service for the Blind and Physically Handicapped
1291 Taylor Street, NW
Washington, DC 20542
(202)707-5100

National Information Center for Children and Youth with Disabilities
P.O. Box 1492
Washington, DC 20013-1492
1-800-999-5599

National Network of Learning Disabled Adults
808 West 82nd Street, Suite F-2
Scottsdale, AZ 85257
(602)941-5112

Orton Dyslexia Society, Inc.
Chester Building, Suite 382
8600 LaSalle Road
Baltimore, MD 21204
1-800-222-3123

President's Committee on Employment of People with Disabilities
1331 "F" Street, NW
Washington, DC 20004
(202)376-6200

Recordings for the Blind
20 Roszel Road
Princeton, NJ 08540
1-800-221-4792/3
(For taped textbooks from fifth grade reading level through college)

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